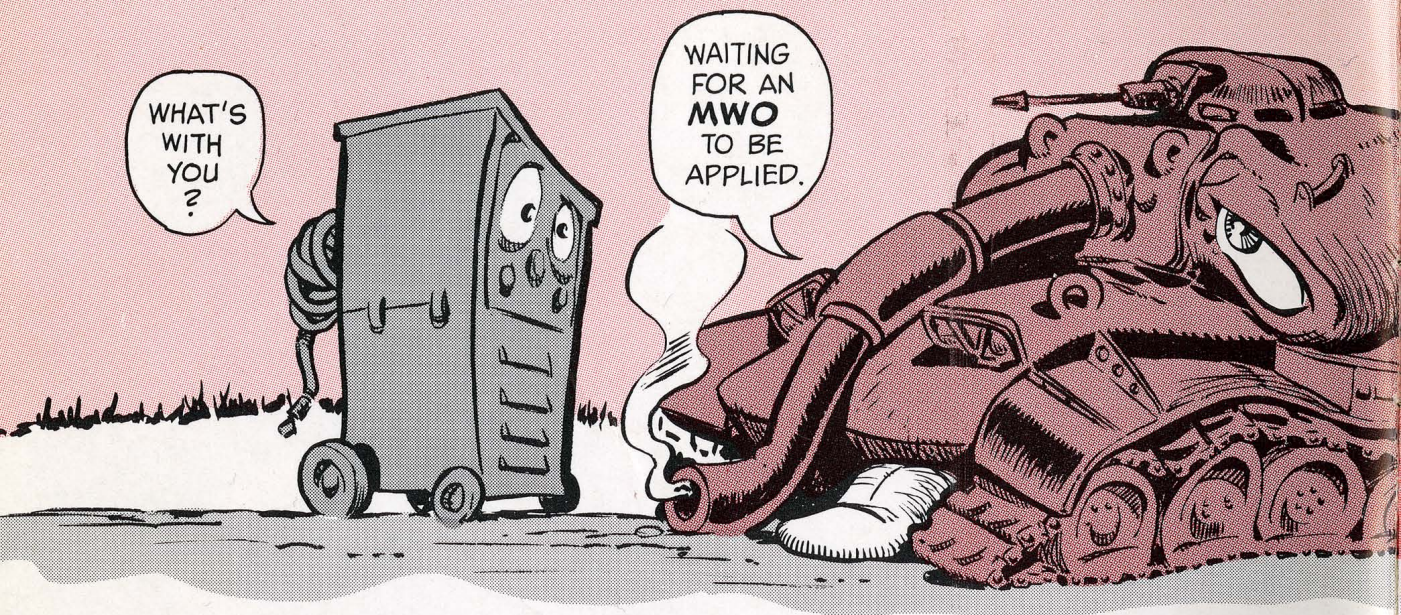
Issue 211
PS
1970 Series
June
THE PREVENTIVE MAINTENANCE MONTHLY
HEY, SARGE... WHEN'S THE RAINY SEASON OUT HERE?
GENERALLY STARTS THE DAY BEFORE YOU BEGIN YOUR WET WEATHER PM!
Will Eisner

UNTIL MWO'S ARE APPLIED . . .

YOUR EQUIPMENT IS



A unit that's second best won't fare too well in a fight — without a lot of luck. And the best way to **insure** your luck is to stay out of that second-best slot.

One way to stay No. 1 is to stay sharp and update your equipment with the latest improvements by design engineers—namely, DA Modification Work Orders. And the O in MWO stands for **Order** — not suggestion or recommendation.

That means:

Get 'em.

Record 'em on your equipment records.

Apply 'em ASAP (or ask your Support to do it if it's their job). Report 'em all — per TM 38-750.

Every sharp operator has **know-how**, 'cause what you don't **know** can hurt you! And here's how to **know** about the MWO's that apply to your equipment.

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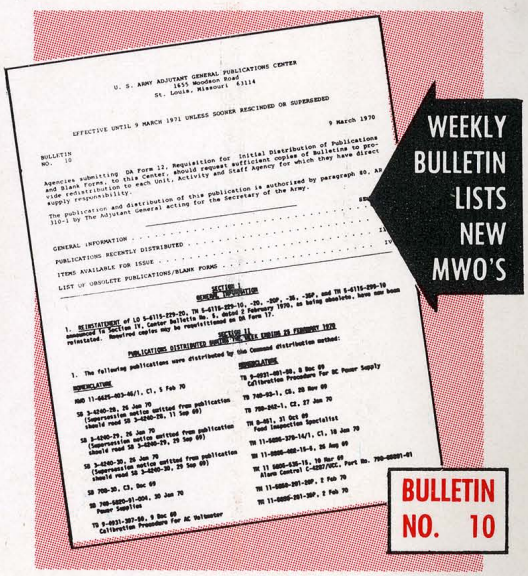
If you've got a pinpoint distribution account, MWO's that apply to your equipment should come along automatically. But don't stake your skin on it. That bulletin's a birdie to **keep** watching.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9 March 1970

BULLETIN NO. 10

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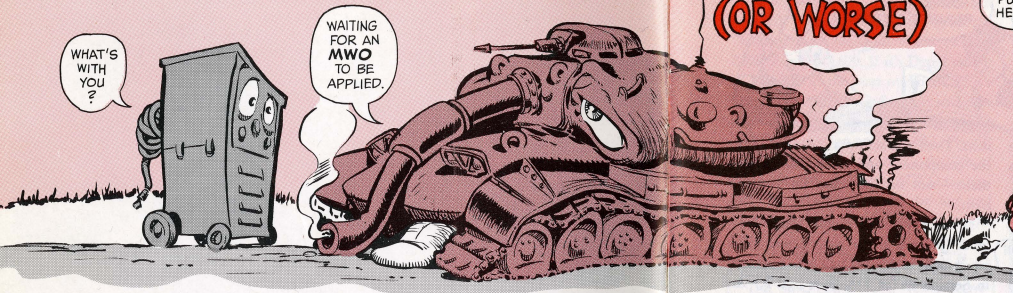
BULLETIN NO. 10

UNTIL MWO'S ARE APPLIED . . .

YOUR EQUIPMENT IS SECOND-BEST (OR WORSE)



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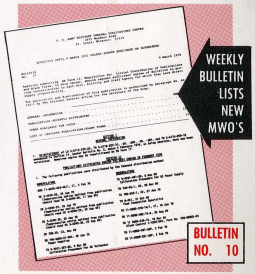

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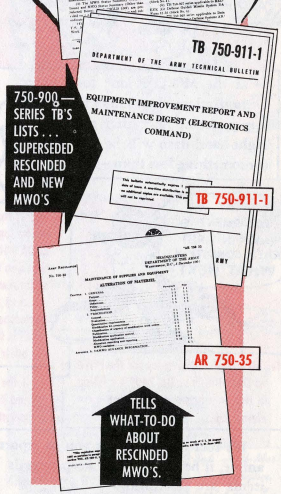
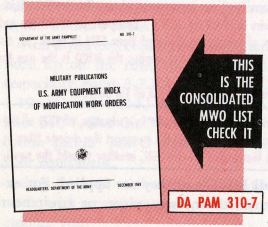
The next place to get in-the-know about MWO's is DA Pam 310-7. That's the consolidated list of all current MWO's. With this pamphlet you can zero in on exactly what items have to be modified — by FSN and serial number — and it now tells you which MWO's are new (they're marked by an asterisk) and lists 'em in numerical order.





PS MORE

SECOND-BEST (OR WORSE)

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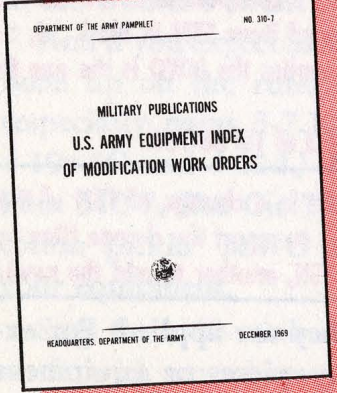
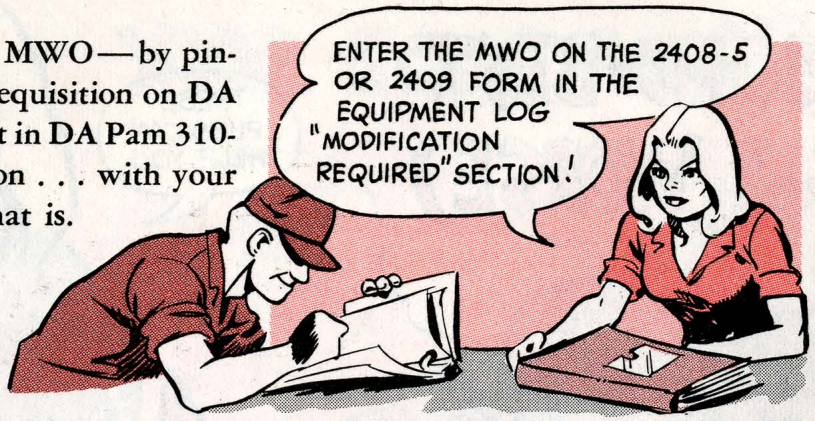


THIS IS THE CONSOLIDATED MWO LIST CHECK IT

DA PAM 310-7

P.S. MORE

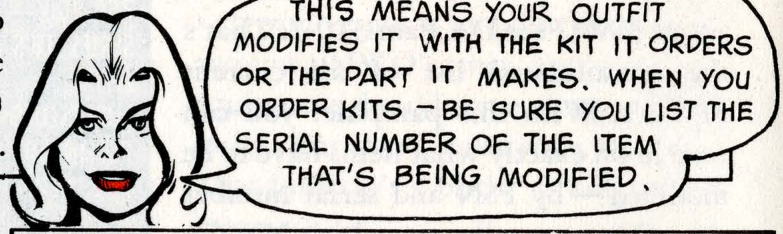
When you get your MWO — by pinpoint or by resupply requisition on DA Form 17 (as spelled out in DA Pam 310-10) — swing into action . . . with your pencil or ballpoint, that is.

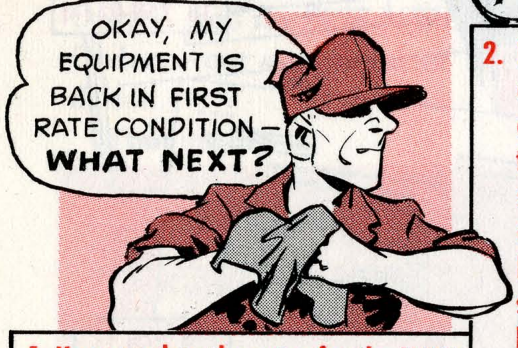


When you have neither of these forms, don't panic. You set up a DA 2408-5 where there wasn't one before. This also applies when the MWO is "specifically applicable" to a component. Then you set up a DA 2408-5 for the component and record the MWO there — **not** on the form for the end item.

If the MWO wears an "URGENT" label (printed at the top) it puts your equipment in the RED. (These are listed in Section IV of DA Pam 310-7.) An Urgent MWO means "equipment inoperable" — by definition. You'll often hear it called "**deadlined.**"

If the MWO is one for Organizational mechanics to apply, the number after the right-hand dash will be –20 (or something **less than** –30).





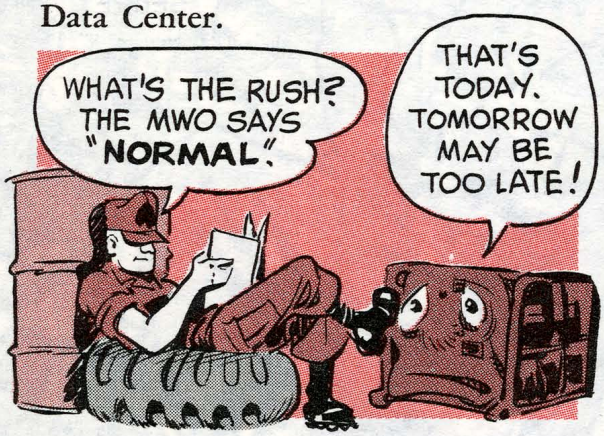
1. You complete the entry for the MWO on DA 2408-5 or DA 2409 by filling in the right-hand "modification com plete" side.

2. Report the MWO application on DA 2407, checking the MWO box at the top. Use one DA 2407 for each item that has a long book or DA 2409. For items with the same FSN, modification of several that don't have logs can be reported on one DA 2407 by listing serial numbers in Block 16. If it's a **component MWO** (as indicated at top of form), put the **end item FSN** in Block 16, too. Remember that the outfit that applies the MWO is the one that sends in the report.
For other entries, See Para 3-7.1.3 of TM 38-750.

3. If the MWO application results in a **change of FSN** of the end item, submit DA 2408-7's to report the change (One to report a loss under the old FSN, another to add the new).

It's real important for you to report all MWO's as they are applied. For example, it helps the NMP keep records on just how many pieces or equipment items are modified.

If the MWO is for Support or Depot to apply, the number after the right-hand dash will be –30 or higher. But you still record the need for it on the "modification required" side of DA 2408-5 or DA 2409. If it's Depot that'll be handled at the next overhaul. If it's DS or GS you ask your Support to do the job or get it done—by requesting the MWO application on DA 2407. They'll take it from there. And it's the job of the outfit that applies the MWO to complete the MWO entry in the log and submit the completed DA 2407 to the Data Center.



Even when the MWO is labeled "Normal," your equipment's still second best until the MWO's applied. All this label does is tell you to proceed with deliberate speed instead of double-time. Get it done if you want to be first in the winner's circle.

And if you expect to stay there, better bone up on the rules in TM 38-750 (especially paras 3-7.1.3, 3-7.1.4, 4-7, 4-19c (4) and 4-21d,) AR 750-35, DA Pam 310-7, DA Cir 750-30 and every cotton pickin' MWO that applies to your equipment.

Stop for a 40-wink nap and even an outfit with second best equipment may clobber you.

PS

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THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 211 1970 Series

June

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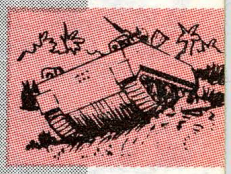

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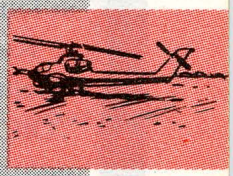

Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 26 February 1968.

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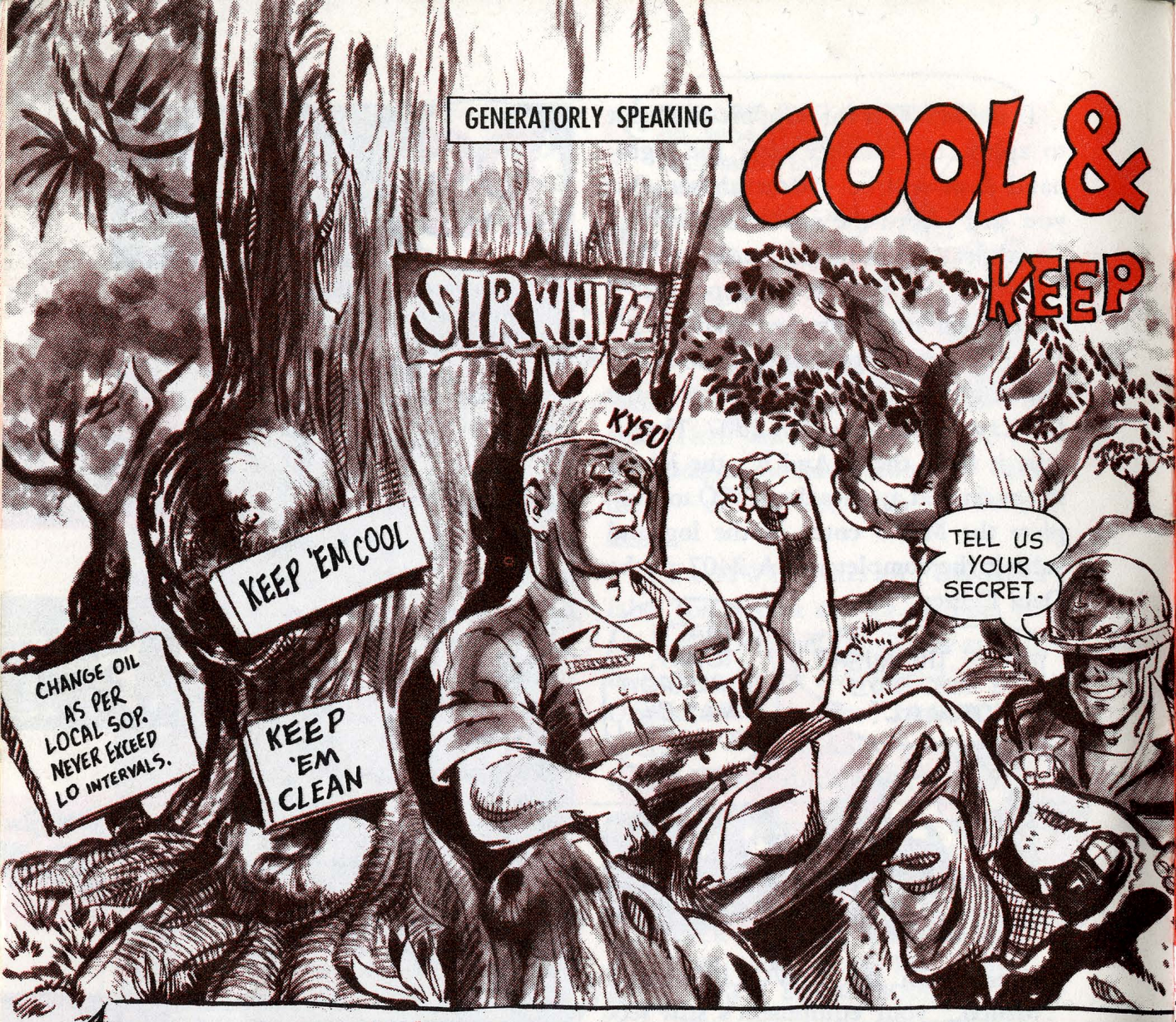

KEEP 'EM CLEAN

Once upon a time there was a wise and knowing wizard . . . a veritable wonder at keeping electrical marvels like, uh, generator sets humming smoothly and at length.

Rumors about the wondrous life span of equipment operated by this Joe frequently filtered down to harried operators in the field. Ofttimes they remarked: "Oh, if I but had the know-how of Joe The Whiz, I could keep these damned sets going until I rotate."

And it came to pass that a delegation of operators, whilst making their way thru a rice paddy one dark night, came upon Joe busily at work on a 5KW Mil Design. Joe looked up from his "workshop" as the powermen approached.

"Joe," they asked, "How come your equipment to hold up so much better'n ours?"

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"In short, man, PM is The Plan," finished The Whiz.

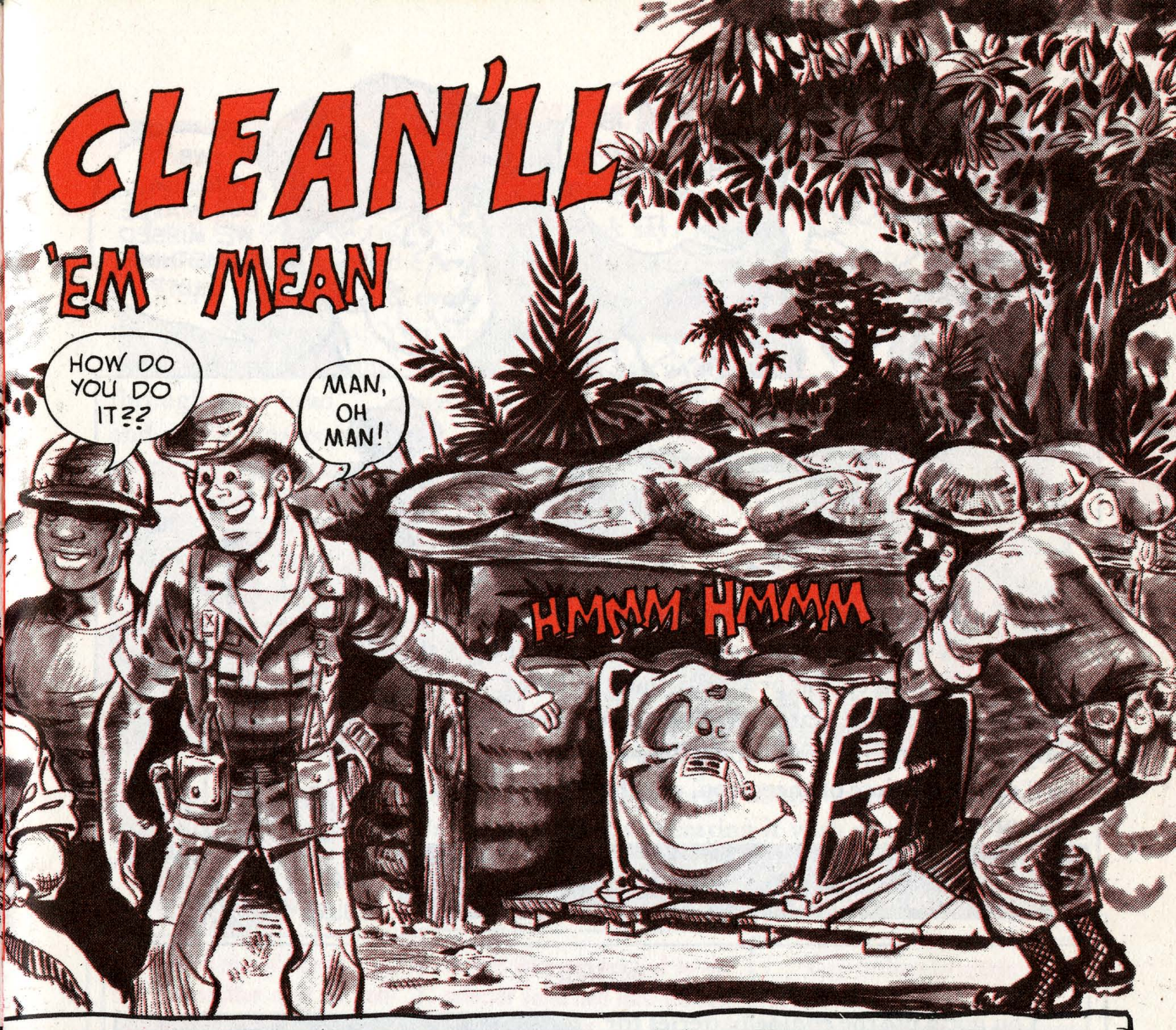
The powermen gasped: "But we pull PM!"

"Not enough," answered The Whiz. "Here, PM is a constant thing . . . as it should be everywhere. Let me demonstrate."

And with that The Whiz drew up a checklist for the powermen that helped 'em keep their generators humming sweetly until they rotated. Here, for the umpteenth time, are bared the secrets of the greatest electrical wizard who ever strolled down TuDo Street. They apply to just about all MilStd sets, and many can be adapted to all sets.

COOL 'N' OILED

CLEAN'LL 'EM MEAN



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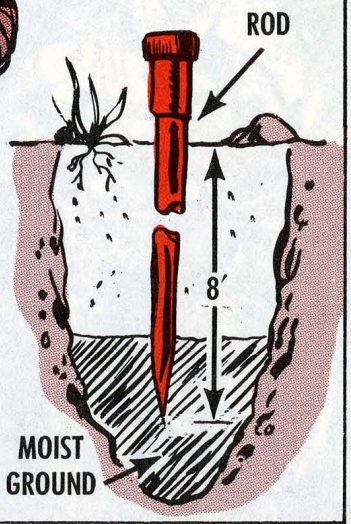
P.S MORE

GROUNDING

The name of the game is moisture. Drive your ground rod at least 8 feet down, to get to it. If you can't get the rod that deep, keep the ground around it moist.

Buried pipes, like water lines, are good grounds. Attach only one ground per pipe. For a long stand you can bury an 8 square ft piece of sheet iron, attached to #6 AWG as ground wire.

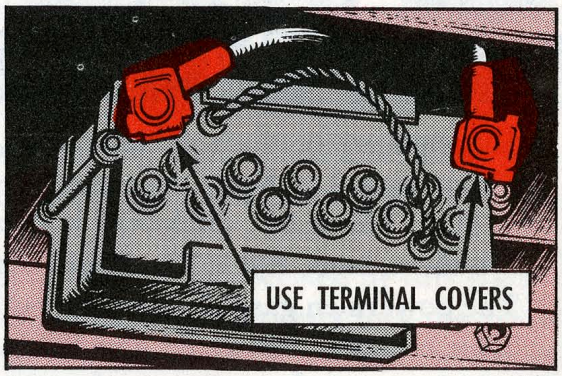
Big point: never operate the set without a ground . . . and keep ground connections tight.

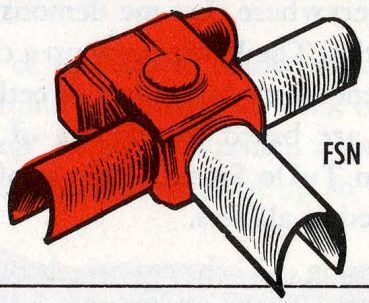


BATTERIES

You gotta use the engine batteries for normal operation position of 5- and 10KW sets. Without 'em safety shutdown circuits are inoperable; meters and such don't work. In emergency run, the operator's gotta be on hand always so's he can shut the set off at first sign of trouble.

Keep battery terminals clean and tight. Be sure cables are hooked up right . . . like, negative post gets the ground lead. When it's hot, check battery fluid levels often. And use battery terminal lug covers (FSN 6140-179-8418) to prevent short out or related damage.





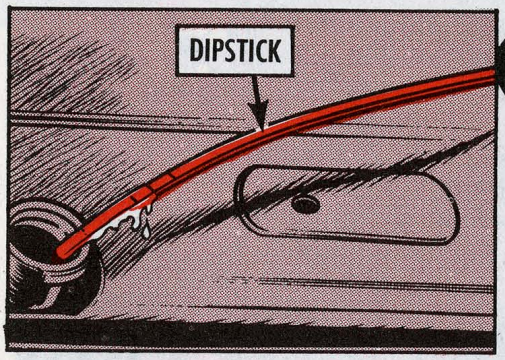
CUT TO FIT TERMINAL AND CABLE
FSN 6140-179-8418

THAT'S OIL, MAN

Your current LO clues you on the kind of oil to use, and SOP tells you when to change it. In SEA it's every day.

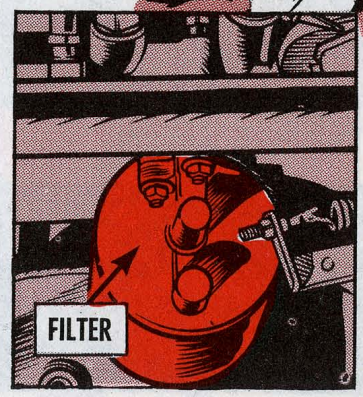
Keep the oil level right where the book says it's supposed to be, and check the level often in hot weather.

In SEA check the level every 4 or 5 hours . . . but shut the engine down first! You can't get an accurate reading with the engine going, and you could get a dipstick through your head . . . since clearance between the stick and moving parts is close.



IN SEA CHECK OIL EVERY 4-5 HRS

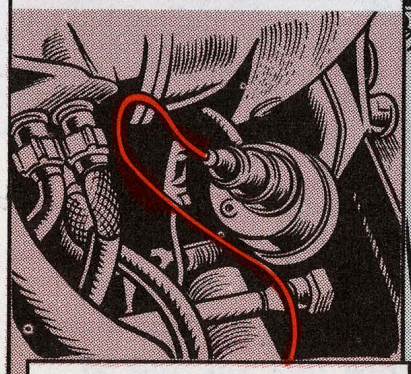
EVERY OIL CHANGE RATES A NEW FILTER



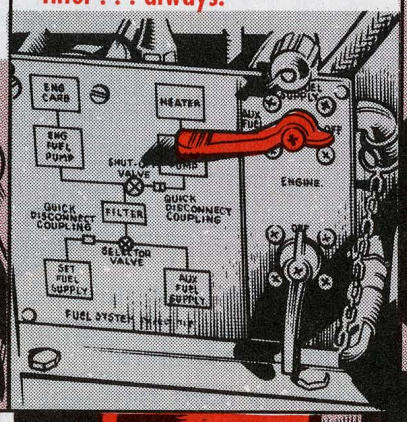
Every oil change in SEA merits a new filter. Forget about operating the generator with a dirty one. That's about as bad as operating it with none at all. Either way you can put the set down.

HOOKUP HANGUPS

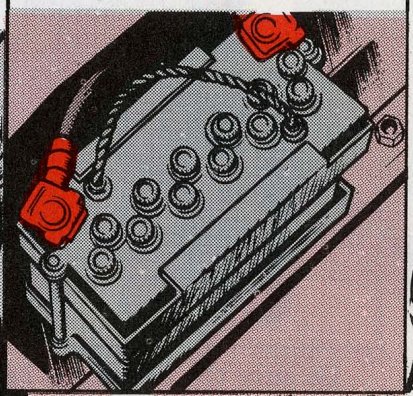
The lead wire of the oil pressure transmitter must be connected to the normally open contact of the switch.



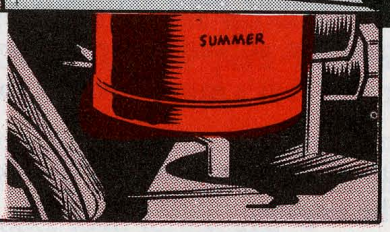
Fuel lines are hooked to the selector valve and thru the fuel filter . . . always.

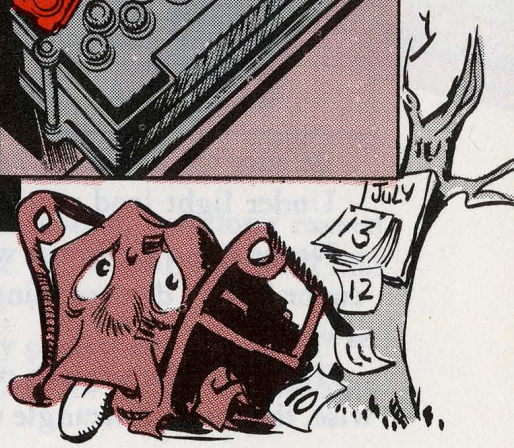


Keep battery terminals tight . . . and polarity right.



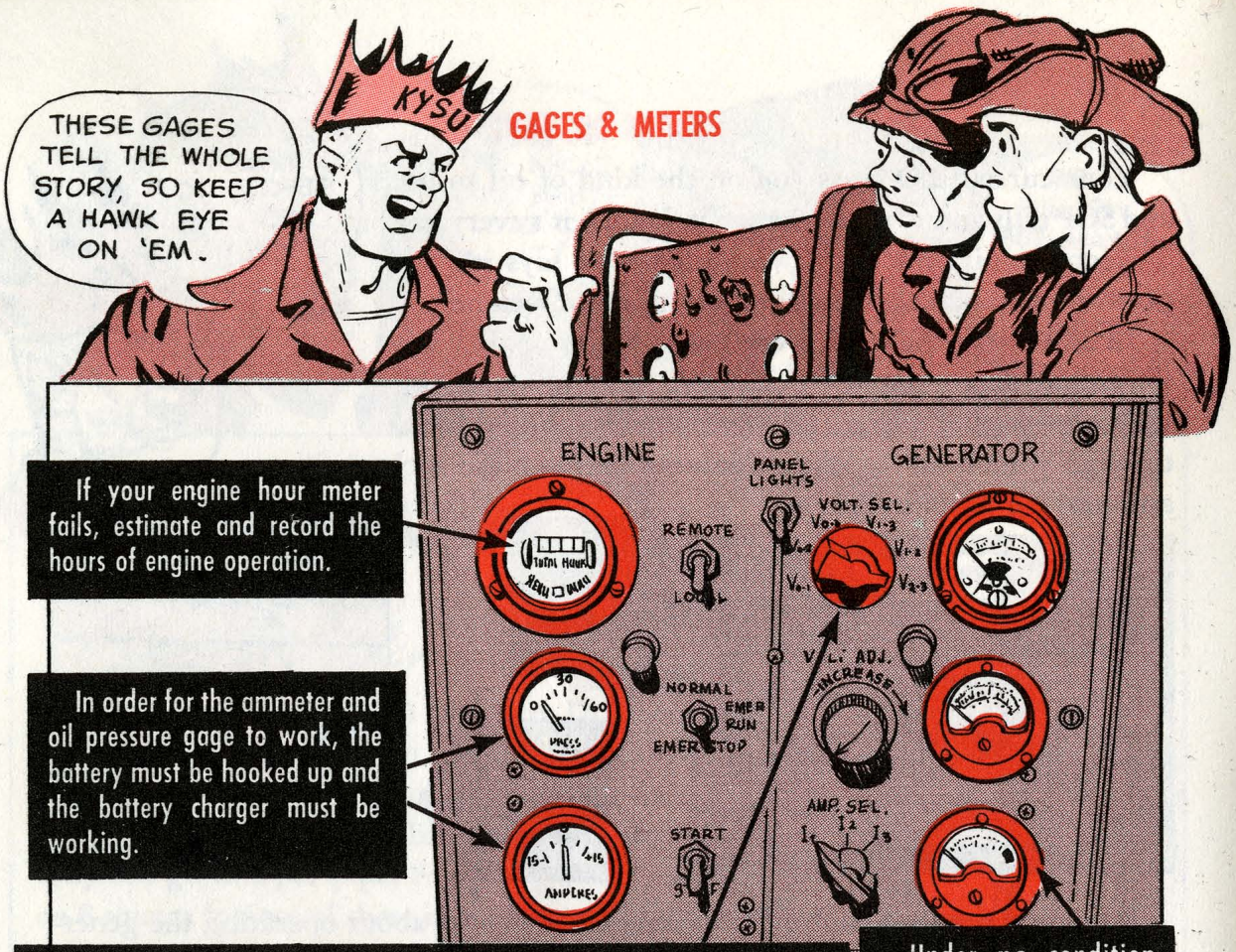
The air intake shutter should be set for "summer" above 32 deg F. and/or the air control handles have to be positioned for high temp operation.





P.S MORE

GAGES & METERS



If your engine hour meter fails, estimate and record the hours of engine operation.

In order for the ammeter and oil pressure gage to work, the battery must be hooked up and the battery charger must be working.

Be sure the voltage selector switch is set correctly in order to insure that the voltmeter is indicating the proper phase voltage. Naturally, you set the percentage of load meter selector switch to indicate the phase load in use. In 3 phase operation use your service selector switch to determine if the load is balanced.

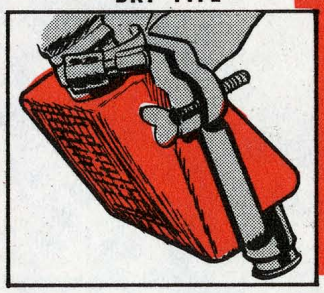
Under **no** condition would you operate the generator with any phase load in the red (the red of the ammeter scale, that is).

AIR FILTERS

OIL BATH TYPE

Check Oil Daily! Clean and change each time you change engine oil — AT LEAST!!!

DRY TYPE



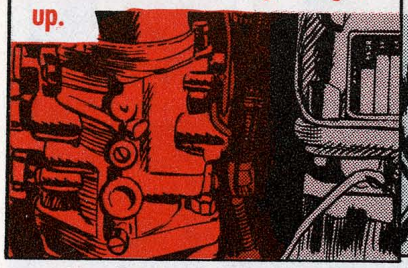
Clean Daily! Use low-pressure air hose. Blow through clean side. Or tap dirt side against solid surface.

Be sure the engine is firing on all cylinders.
Under light load your sparkplugs need frequent cleaning.

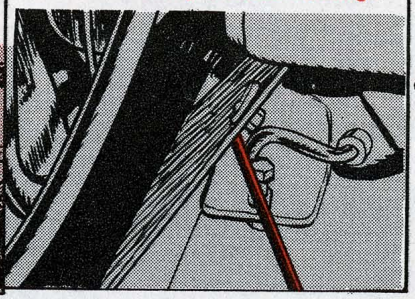
Never clean air filters with gas, solvents or oil-based cleaners. It'll either ruin 'em or leave a dirt-trapping film that's more efficient than any fly sticker you ever saw.

If you get the urge to run an engine without the air filter, strangle it. Otherwise, the result'll strangle the engine.

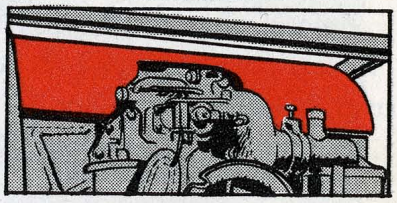
On your 10KW jobs an occasional check of the magneto drive gear sleeve nut can save much grief . . . like damage to the drive and housing. Snug it up.



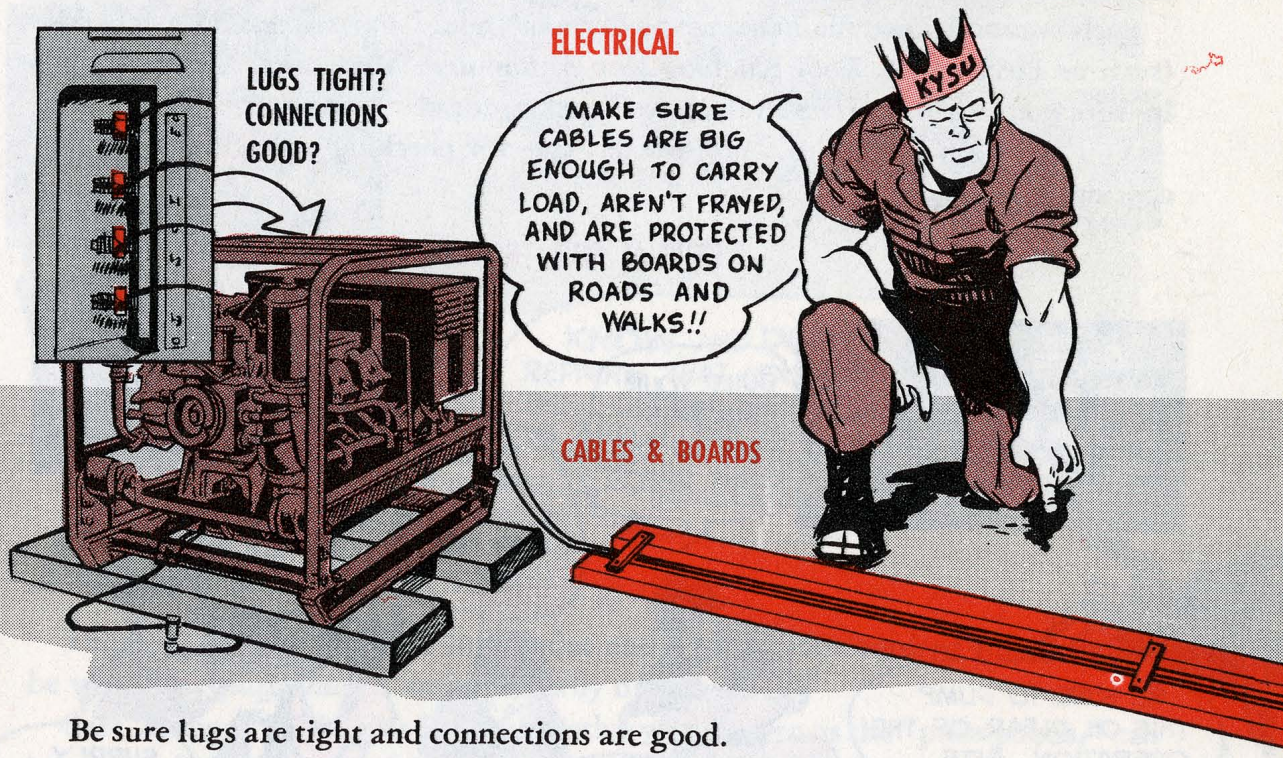
The oil pan baffle-rod goes toward the rear of the engine when used in tropical climates. Wire it to keep it from moving.



On 3-, 5- and 10KW sets, be sure you put back the top shroud, or cover, before you operate the set. That goes for repairs, too. The shroud's vents circulate air to specific, critical areas . . . and you can burn up the set quick-like without that circulation. Remember it!



ELECTRICAL



Be sure lugs are tight and connections are good.

Same goes for external wiring. Be sure they are long enough so's there's no strain on the wire or connections.

Be sure any load wires lying on the ground are insulated, and don't exceed 100 percent of load. Read on, and peek back at the GAGES & METERS material.

Before you hook up the generator, know how many phases are to be used . . . and the voltage required. Then, all you've gotta do is set the service selector switch and tie into the proper load terminals.

PS MORE

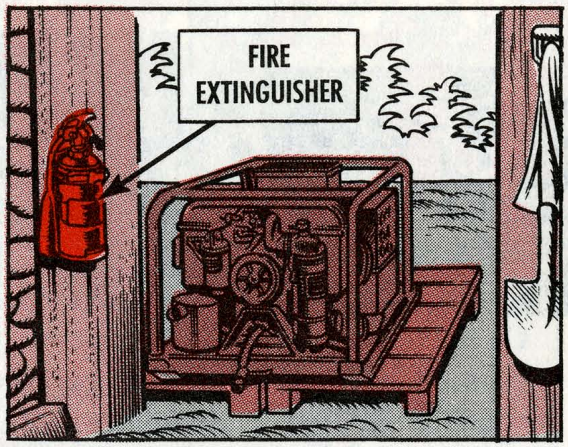
Always refer to your TM before hooking up 5- and 10KW sets.

Let the generator run a short while after removing the loads. Shutting it down as soon as you remove the loads can damage it.

A dry chemical fire extinguisher should be near the generator whenever it is operating.

If the starter is disconnected, tape the wires to prevent shorting. On MilStd sets up to 10KW, a defective starter doesn't deadline the equipment. They can be started with the starter rope.

Release the starter after 30 seconds . . . and give it a 5-minute rest between tries. In other words, let it cool off.

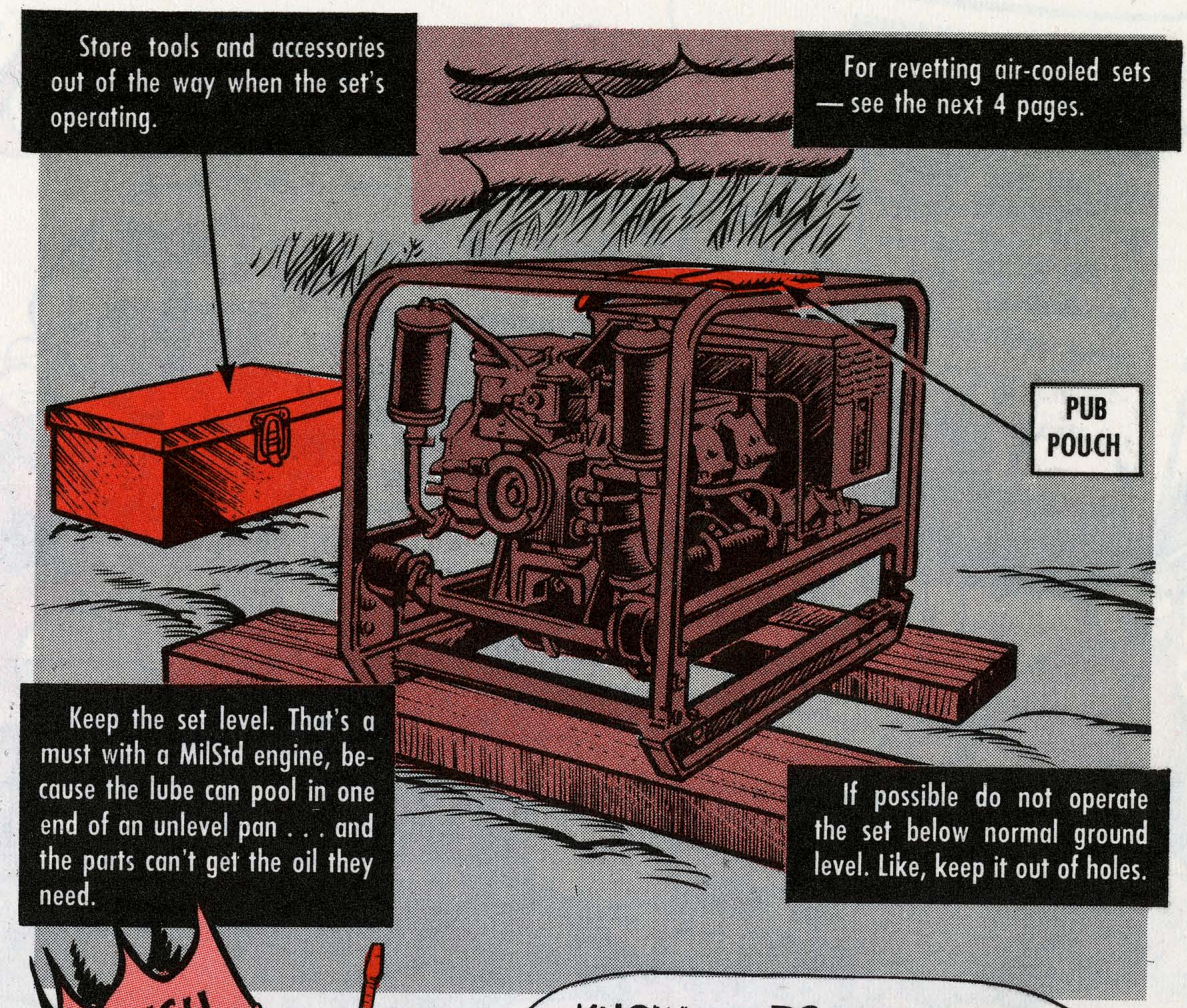


TOOLS

Each organizational maintenance powerman should have access to a tool kit (such as Electrician's Tool Kit No. 2 or Automotive Mechanics, Lightweight). Be sure your kit has a 7/8-in deep well socket, for removing spark plugs.

You gotta have access to a multimeter, too, for checking voltage and wiring continuity.

GENERAL POINTERS



KNOW, AND DO, ONLY THOSE REPAIRS THAT YOU'RE QUALIFIED TO DO... OLDEST STORY IN THE WORLD IS ABOUT THE SIMPLE JOB MADE DIFFICULT 'CAUSE SOMEONE BUNGLED IT!

RECORDS & PAPERS

The operator TM, current lube order and TM 38-750-required forms should be with the equipment . . . or in a nearby dry shelter.

Case, Manual, FSN 7520-559-9618, otherwise known as the "pubs pouch," can be used to hold the pubs, forms, and even the logbook (during operation). Mount the pouch on the equipment. If your tool kit doesn't have 'em, you can keep a screwdriver, pliers and an 8-in adjustable wrench in the pouch.

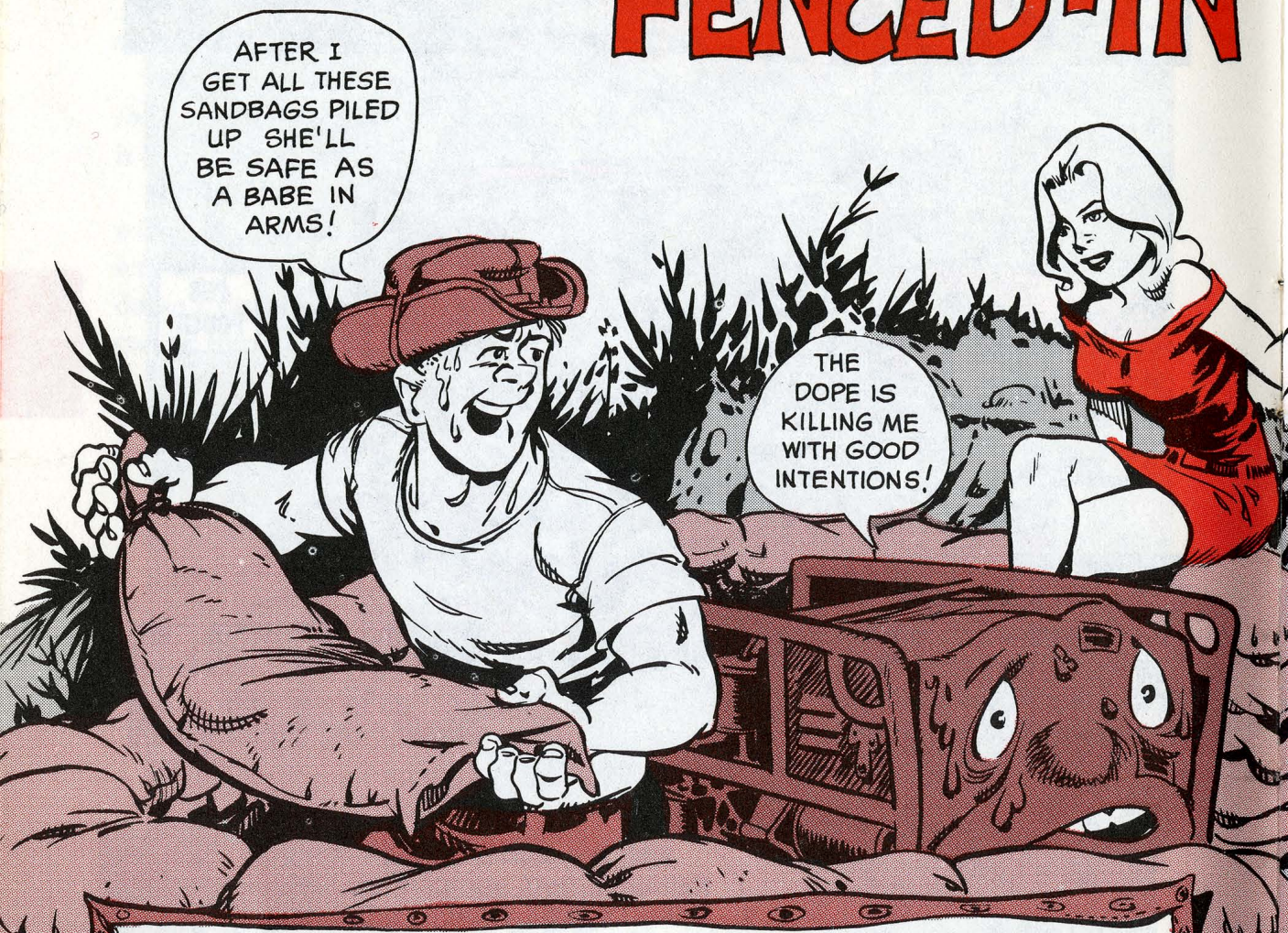
Records go with the equipment when you turn it in, send it off for repair, etc. Refer to TM 38-750 on how to replace lost or ruined records — and their safekeeping is **your** responsibility.

And, so, you put your nickel in the pot, deal your own cards, and the hand you get depends on whether you, too, want to be a Whiz . . . or a fizz.

PS END

LEAVE "BREATHING" ROOM FOR THAT...

FENCED-IN



Sandbags make a "cool" shelter for stopping steel splinters and any hot metal that zings your way.

But here's a hint from your generator powered by an air-cooled Military Standard engine: "Don't fence me in too snug!"

Stacked too close to this air-cooled baby, sandbags or any walls that block the air flow can kill it.

Cutting off free flow of air makes the engine overheat. And the same thing can happen if you crowd 2 or more of these babies together.

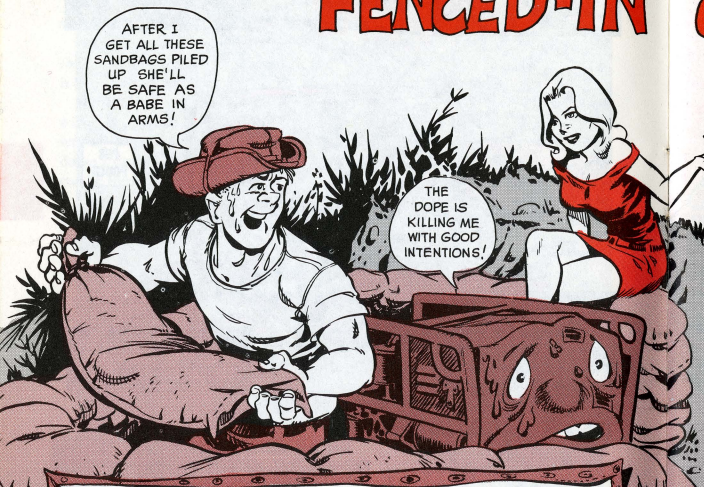
Overheating leads to such engine zappers as (1) vapor lock, (2) over-use of oil, (3) extra—and more-frequent—PM service and (4) other damage from heat concentration.

So . . . you want to sandbag that generator with a well-stacked revetment and maybe a roof—as called for by conditions. But no hug-me-tight fences.

The question is: What's "too close" for those revetment walls and roof? On the uptight scene, with both the action and the temperature super-hot to begin with, a wrong answer can zap your generator engine.

LEAVE "BREATHING" ROOM FOR THAT...

FENCED-IN GENERATOR



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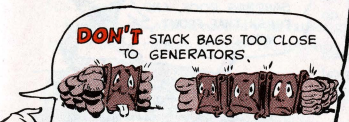


MINIMUM SIZES

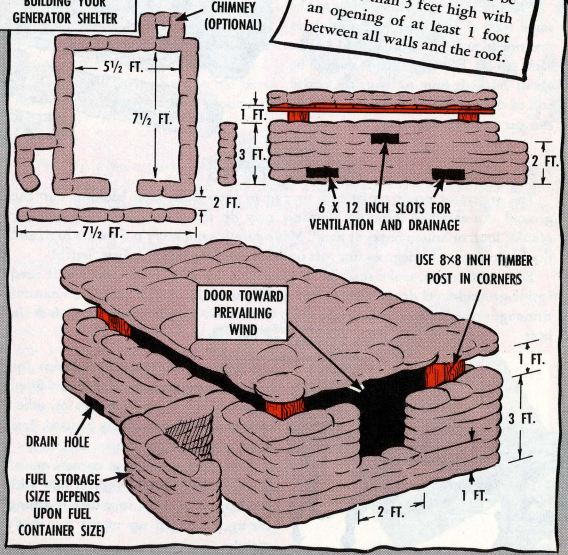
Large economy-size revetments are cooler, but they take more bags to build and may leave you over-exposed.

So, here are the **minimum allowable inside** dimensions for revetments when generators are powered by Military Standard engines—

1.5 thru 10 KW sets—5½-ft x 7½-ft.
0.5 KW sets — 4-ft x 5-ft

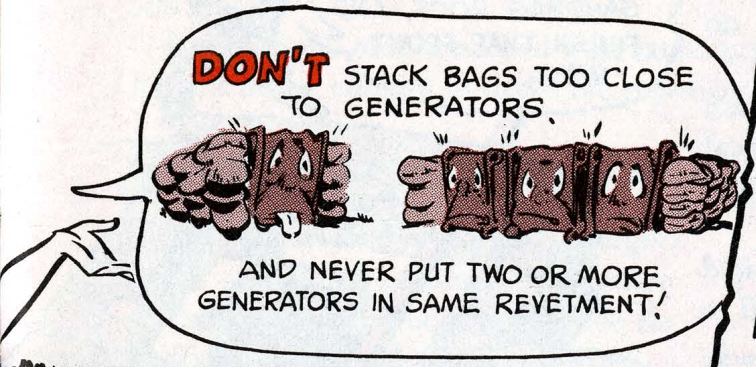
Revetment walls should be no more than 3 feet high with an opening of at least 1 foot between all walls and the roof.

HERE'RE DIAGRAMS FOR BUILDING YOUR GENERATOR SHELTER



PS MORE

GENERATOR



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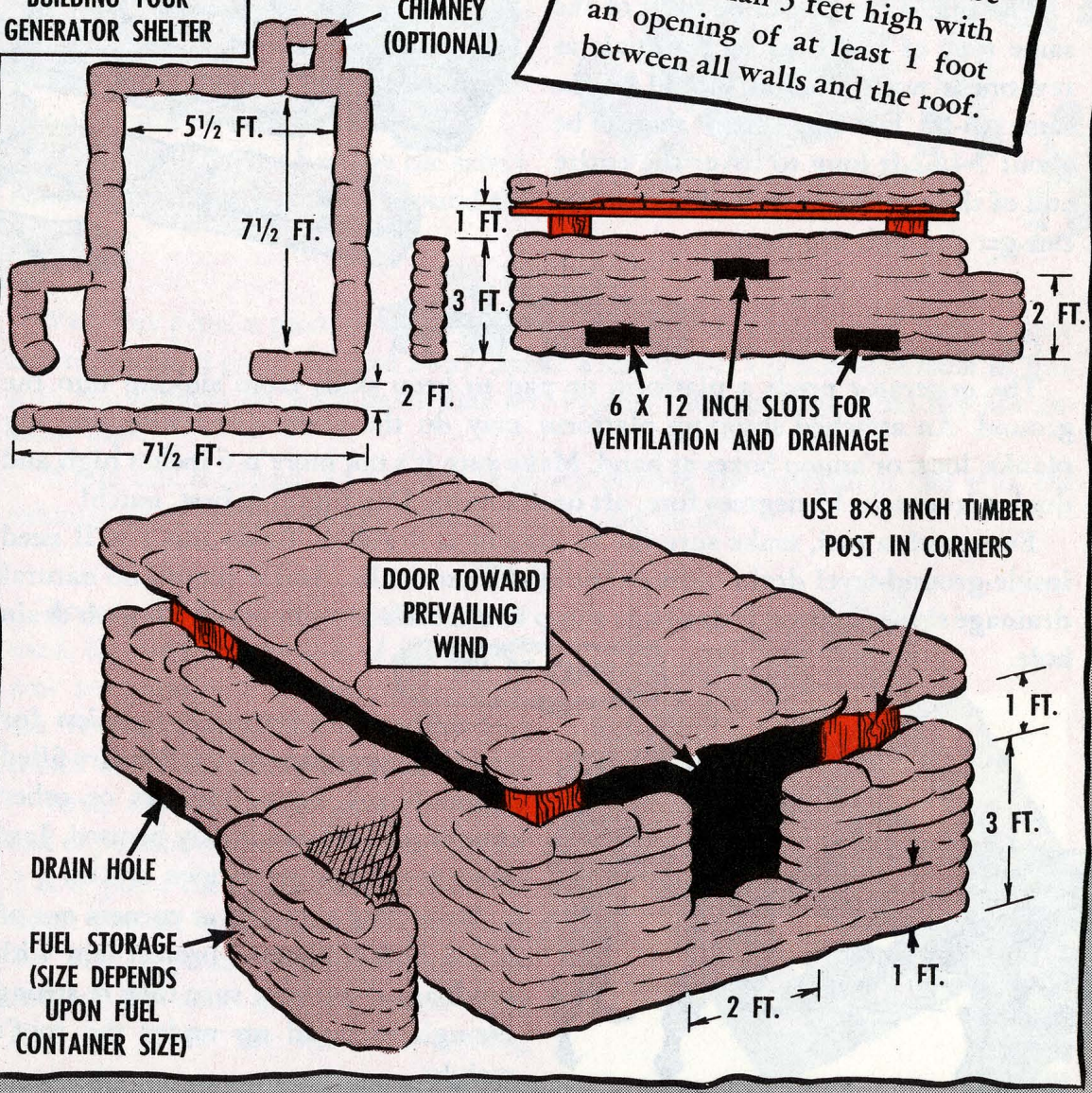


PS MORE

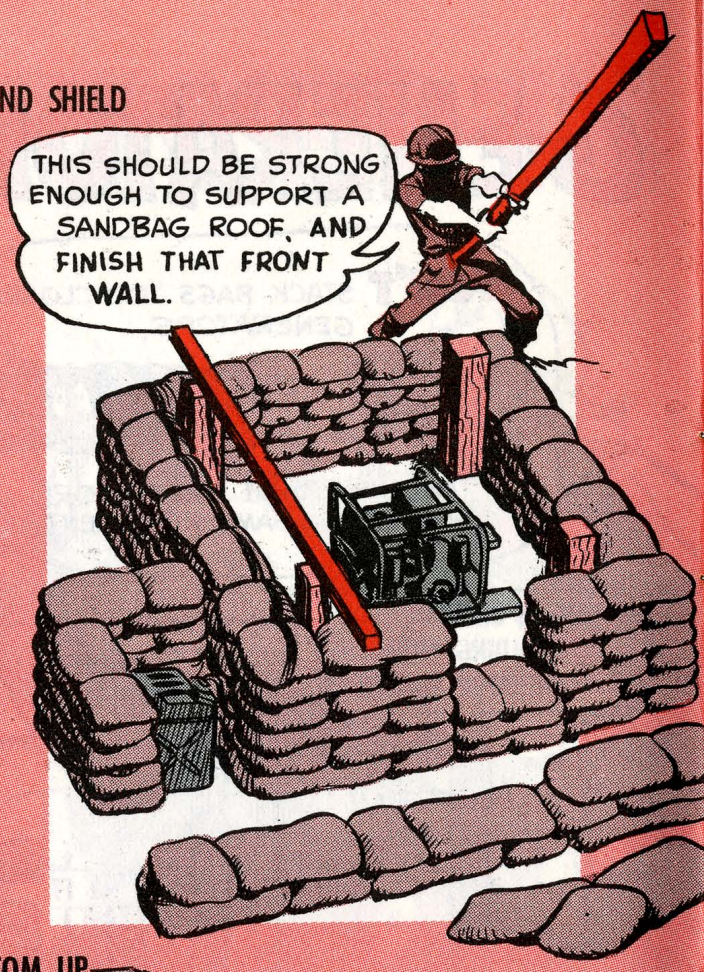
DOOR AND SHIELD

In the revetment end that faces toward the prevailing wind, make an entrance 2 feet wide, with a sill no higher than 1 foot.

This gives you air-circulation space and access plus the minimum practical amount of room for service and maintenance.

But for your own skin's sake, shield the door with another wall (parallel to the wall with the door and 2 feet away from it).

The shield (wall) can be built of the same type of sandbags or materials as revetment walls. Height should be the same (3-ft) but the shield should be about 7-1/2-ft long to cover the entire end of the revetment so no flying metal can get through the door.



BOTTOM UP

Off the ground, that is.

The generator needs a platform or pad to keep skids from sinking into the ground. An attached shipping platform may do the trick. Otherwise use any planks, logs, or ammo boxes at hand. Make sure it's not more'n 6 inches high and don't tilt more'n 15 degrees fore, aft or sideways. Dead level is best, natch!

Even with a pad, make sure the revetment is drained. To do this you'll need inside-ground-level drain holes in the revetment walls. And if there's no natural drainage slope, an outside drainage sump and trench must be made for each drain hole.

WHAT TO USE

Sandbags are normally handiest for building revetment walls. But dirt-filled ammo boxes, heavy timbers or other close-fitting materials may be used. Just don't leave any wide-open cracks.

Make roof supports at corners out of 8 x 8 inch timbers — protect 'em with sandbags — making sure they're strong enough to stand up under the roof's weight.

Two 10-foot wooden 4x4's or logs of 4-in diameter, laid the long way atop the corner posts and 1-ft above the walls, form the base support for the roof. And across these you lay planks, logs or steel cross pieces. These should be about 8 feet long.

Build up the roof as needed with sandbags or other material—but make sure it's not heavy enough to make the supports buckle.

FUEL APART

Fuel containers—even the integral tanks sometimes supplied with generators—should **not** be stored inside the generator revetment.

Instead, a separate fuel tank revetment, or compartment, should be built outside the wall of the main revetment, the size depending on the size and number of drums or cans to be stored.

The reason: To cut back on the safety hazard when heat builds up around the generator.

PIPE THE EXHAUST

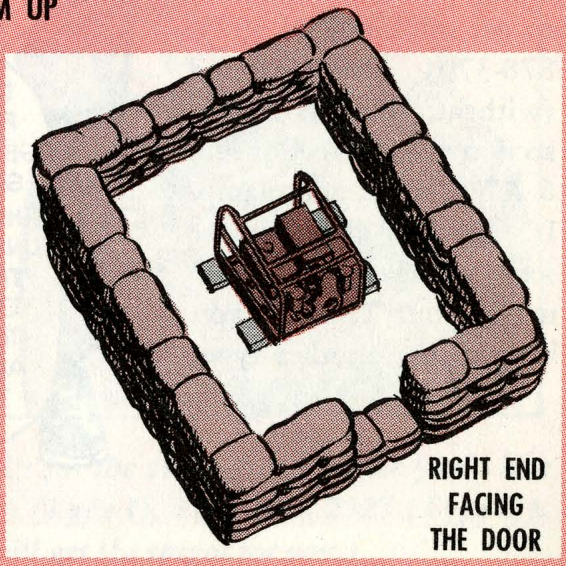
With flex pipe, a piece of an old exhaust pipe, or other metal pipe, make a duct to carry exhaust gases out and away. Make a small hole for this extension in line with the exhaust on your particular set. Protect the sandbags from the hot exhaust pipe.

While not required, an exhaust chimney outside the revetment can take the exhaust gases farther away—and cut down the noise.

LINE 'EM UP

To get the best cooling in the space used, line up the long side of the generator set parallel with the long side of the revetment, and set it on its pad smack in the middle of the space.

First, though, make sure the right end is pointed toward the door. If it's a 3 KW point the **engine** end toward the door. For all others (0.5 KW through 10 KW), point the **generator** end toward the door. (That's because this line up gives 'em the best cooling action.)



PS MORE

SINGLES ONLY

If you put 2 or more generators inside the same walled space, their combined heat is hotter than one alone. Likewise, other equipment that puts out heat will up the mercury reading inside those walls.

So when you've got 2 or more of these heat builder-uppers, give each its own fenced-in space.

It's the cool thing to do. Keeps **down** failures, smoothes out the action, keeps **up** the flow of that hot juice.

ONE GROUND ROD

Dear Half-Mast,

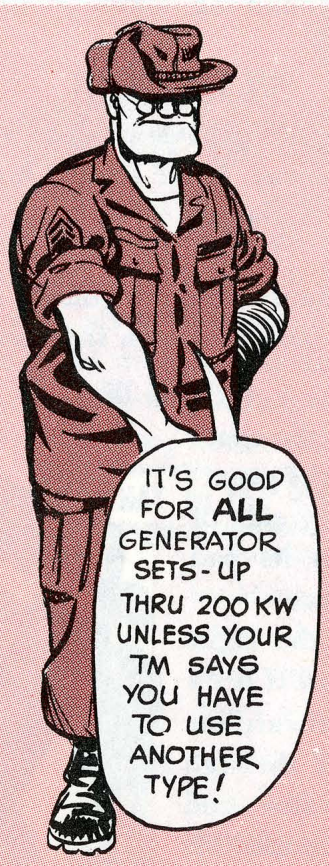
Please give the word on ordering ground rods for power generators. Some say order parts separately. Others say use a kit.

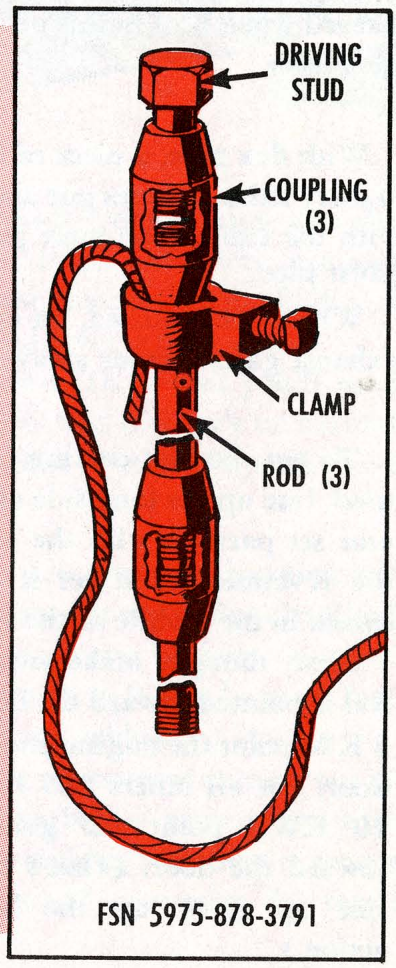
SP4 W.F.Z.

Dear Specialist W.F.Z.,

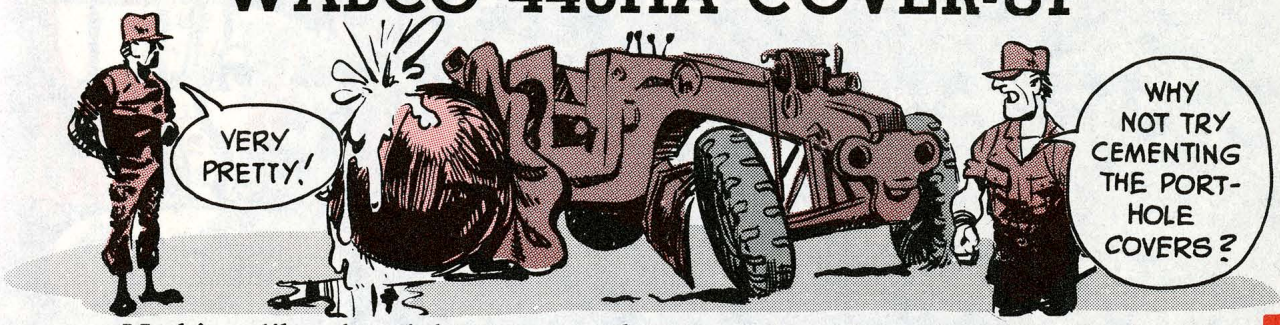
It's handier all around to get the kit, FSN 5975-878-3791, Rod, ground (with attachments): A 3-section rod, 10 feet of No. 6 AWG wire, and clamp. It's good for all generator sets up thru 200 KW unless your TM says you have to use another type.

Half-Mast





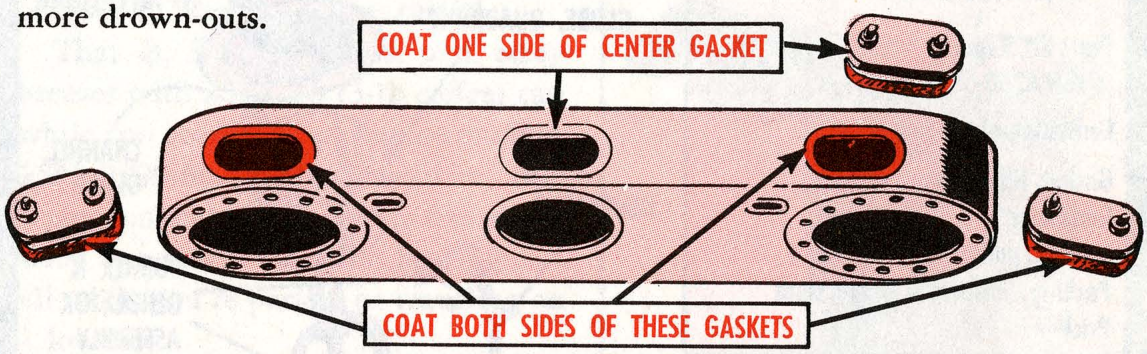
WABCO 440HA COVER-UP



Nothing like the right cover to keep out the rain and guck — and your WABCO grader will agree. Lube contamination will do it no good.

The porthole covers on your tandem drives—3 on each side—leak like crazy unless you set 'em on straight, cement 'em right, and tighten in place.

Use shellac or any good non hardening gasket adhesive, and coat both sides of the 2 end-plate gaskets. Coat the bottom side of the center gasket, and use that port for lube inspection and fill. Snug the plates up—and you'll have no more drown-outs.



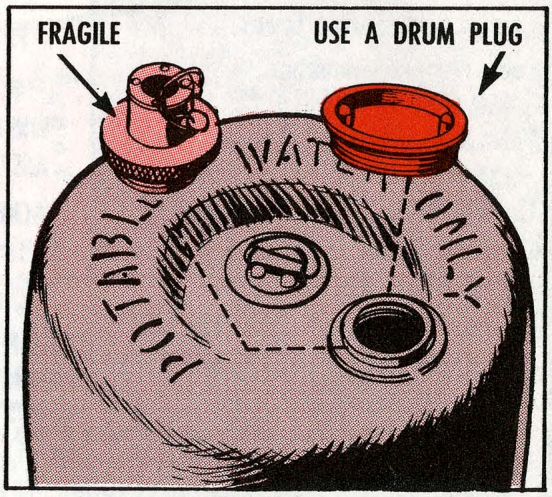
SAVE THOSE SPIGOTS

Dear Editor,

We've found a way to save the plastic spigots on our 55-gal rubber drums that're used to carry water to the troops in the field. The spigot is fragile and often breaks due to frequent air shipment.

We remove the spigot and replace it with the plug from a 55-gal drum. The plastic spigot's sent with fragile cargo and installed when the rubber drums are landed.

CPT. Scheifele
APO S.F. 96225



(Ed Note—A good idea. Here're the FSN's for the drum plugs in case you'd like to have an extra around—8110-132-9640 (Type I), 8110-286- 2527 (Type II). They both will fit. FSN 8110-089-4504 will get the spigot for you.)

A LITTLE LIGHT

Dear Half-Mast,

Our outfit has several gasoline lanterns, FSN 6260-170-0430, but no publications. How can I order repair parts?

CW2 O.D.

Dear Mr. O. D.,

A repair parts and special tools list (like a packing list) should have come with your lantern. There's no lantern TM.

Here're the organizational repair parts that you can stock:

Mantle, FSN 6260-270-4060 (6 per Box)

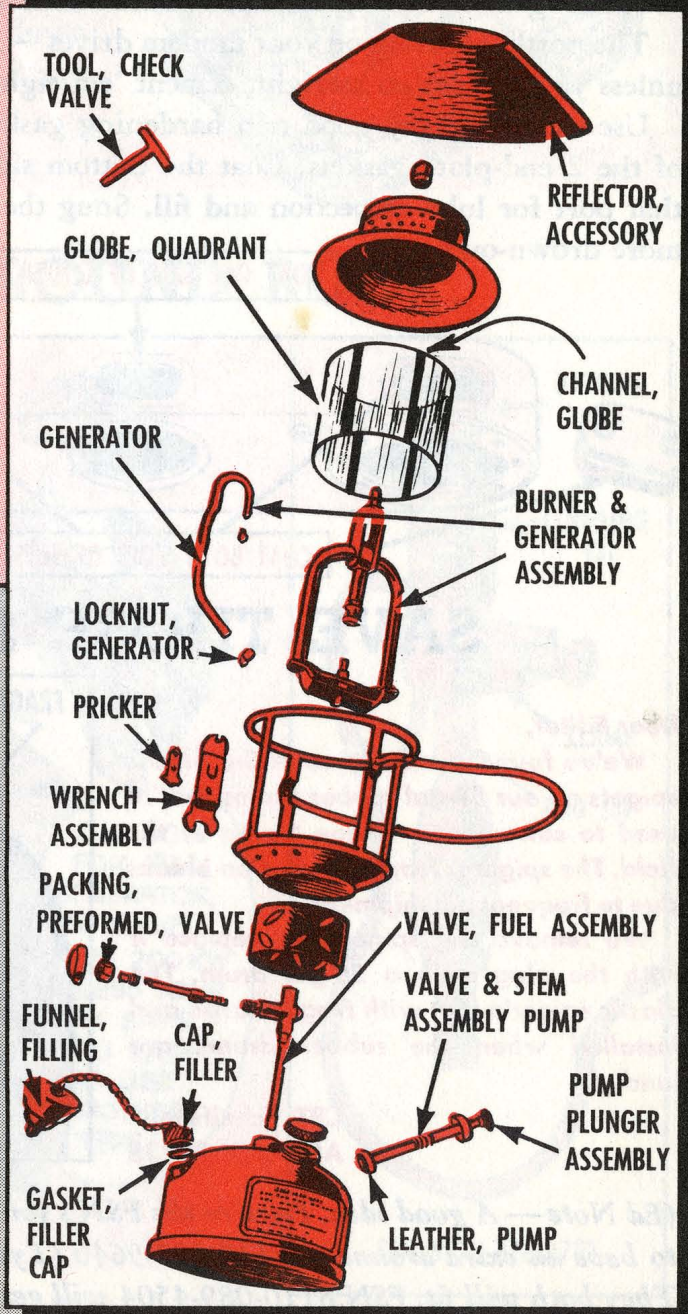
Parts Kit, Repair, FSN 6260-553-1090

Consisting of the following:

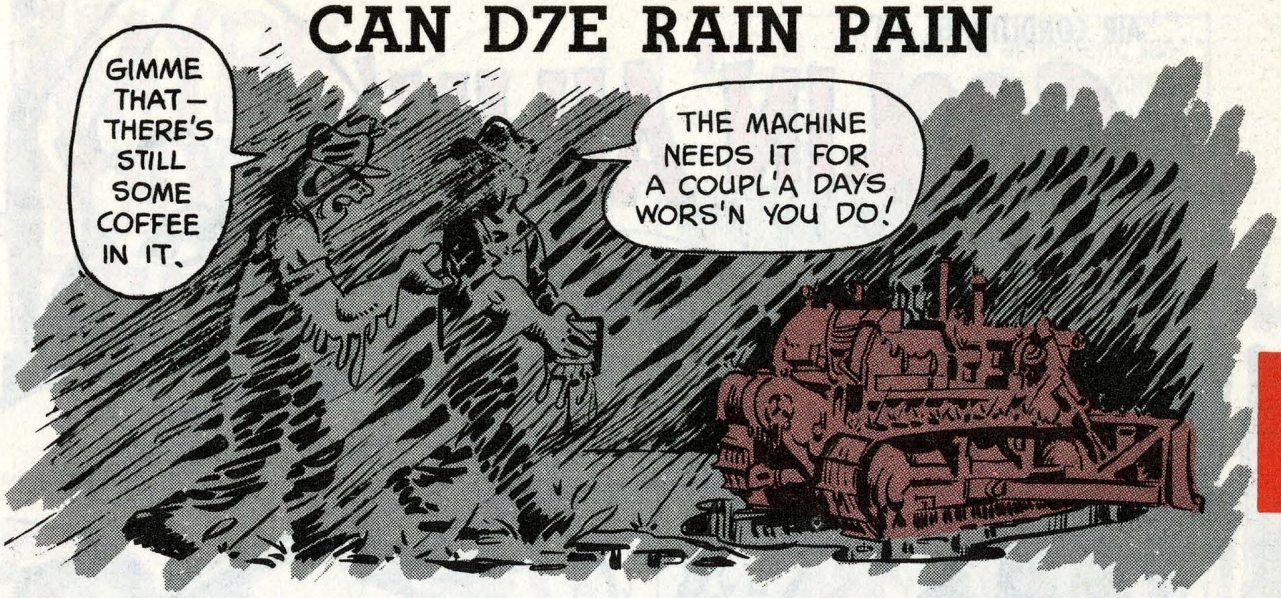
Gasket, filler cap
Generator
Leather, pump
Packing, preformed, valve stem
Pricker

You can order these, but you can't stock them at the organizational level:

Pump Plunger Assembly, FSN 6260-284-0555
Valve & Stem Assembly Pump, FSN 6260-624-4847
Channel, Globe, FSN 6260-174-3873
Quadrant, Globe, FSN 6260-174-3874
Funnel, Filling, FSN 6260-578-7162
Wrench Assembly, FSN 5120-288-9687
Tool, Check Valve, FSN 5120-646-7576
Reflector, Accessory, FSN 6260-273-9219
Locknut, Generator, FSN 6260-161-1859
Valve, Fuel Assembly, FSN 6260-284-0549
Cap, Filler, FSN 6260-270-4061
Burner & Generator Assembly, FSN 6260-284-0554

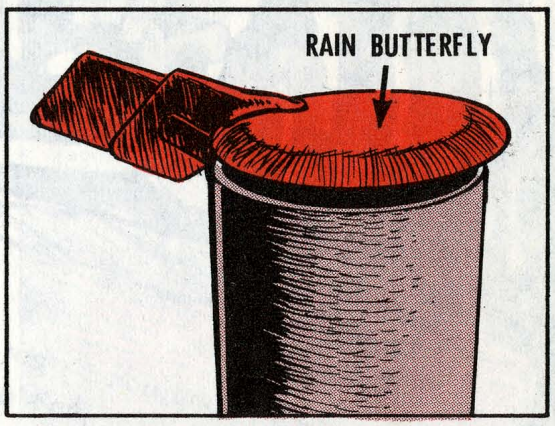


CAN D7E RAIN PAIN



When the rain butterfly gets knocked off your D7E exhaust pipe, can it!

That is, keep out rain and stray breezes with a No. 10 (3-lb coffee) can while you reorder Cap, Engine muffler, FSN 2990-802-2139. Otherwise, rain water can make your engine freeze and wind can jinx your turbo bearing . . . all while you're parked or traveling on a low boy.

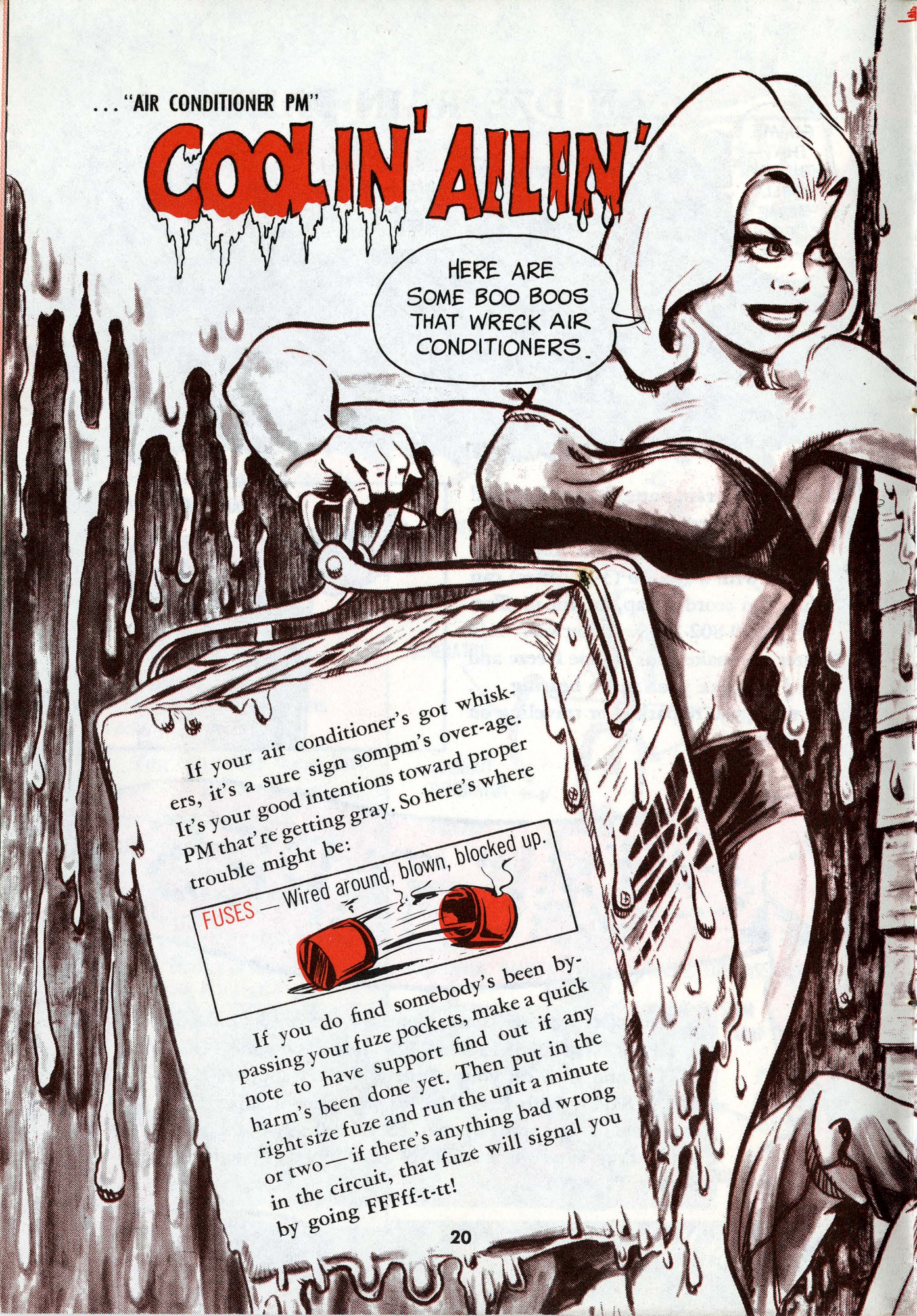


FADAC TAPE

The teletypewriter companion for your M18 FADAC is TT537/G, FSN 5815-926-7378. Just show your TOE, MTOE and UIC on your request. Supply support can MILSTRIP it with RIC B16. Replenishment tapes are available in the supply system. FSN 1290-999-6302 gets you Survey Tape No. 1 and FSN 1290-999-6303 delivers Survey Tape No. 2.

. . . "AIR CONDITIONER PM"

COOLIN' AILIN'



If your air conditioner's got whiskers, it's a sure sign sompm's over-age. It's your good intentions toward proper PM that're getting gray. So here's where trouble might be:

FUSES — Wired around, blown, blocked up.

If you do find somebody's been bypassing your fuze pockets, make a quick note to have support find out if any harm's been done yet. Then put in the right size fuze and run the unit a minute or two — if there's anything bad wrong in the circuit, that fuze will signal you by going FFFff-t-tt!

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HERE ARE SOME BOO BOOS THAT WRECK AIR CONDITIONERS.

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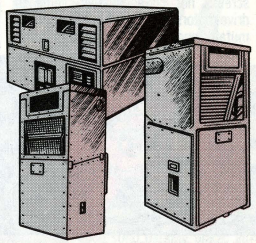
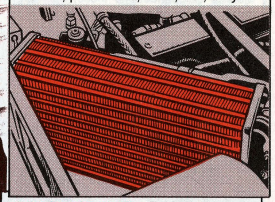
MAYBE YOU'RE FAILIN'

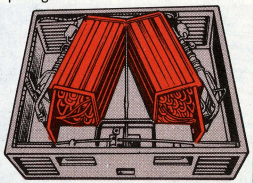
HOUSING — Case out of alinement, fasteners loose, missing; deflectors, dampers, or guards covered with lint, dirt, oil and grease.



CONDENSER COILS—Blocked by shreds, leaves, plant fibers, trash; wet; dirty.



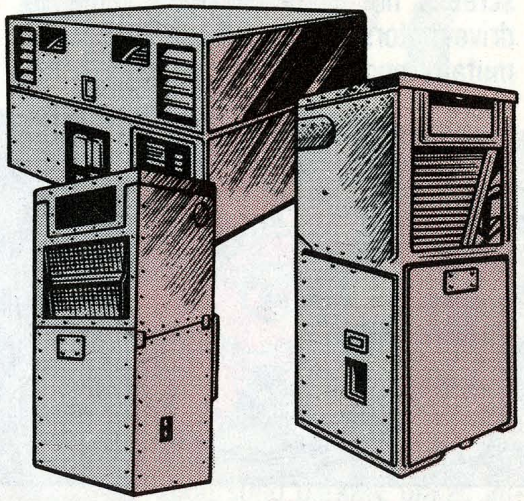
EVAPORATOR COILS—Tubing damaged; fins bent or dirty; ice or drips clogging base or face; dirt or trash obstructing passages.



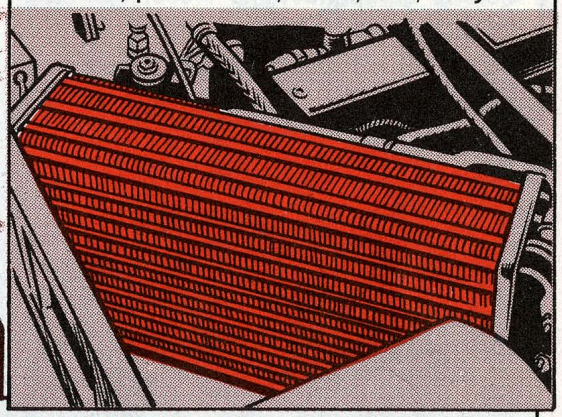
PS MORE

MAYBE YOU'RE FAILIN'

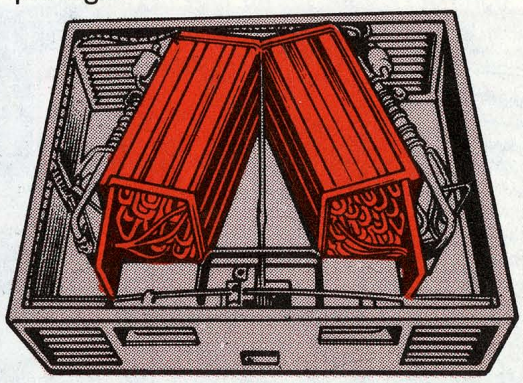
HOUSING — Case out of alinement, fasteners loose, missing; deflectors, dampers, or guards covered with lint, dirt, oil and grease.



CONDENSER COILS—Blocked by shreds, leaves, plant fibers, trash; wet; dirty.

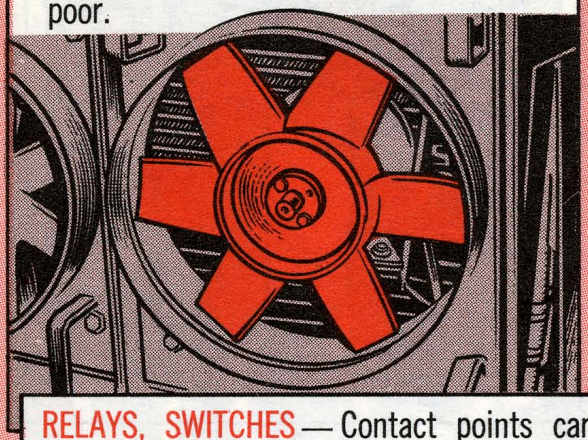


EVAPORATOR COILS—Tubing damaged; fins bent or dirty; ice or drips clogging base or face; dirt or trash obstructing passages.

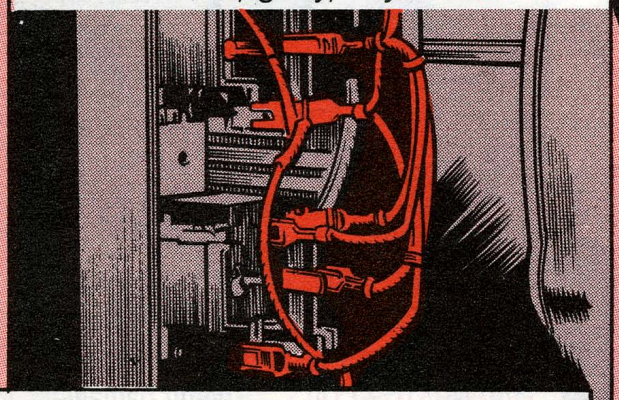


P.S MORE

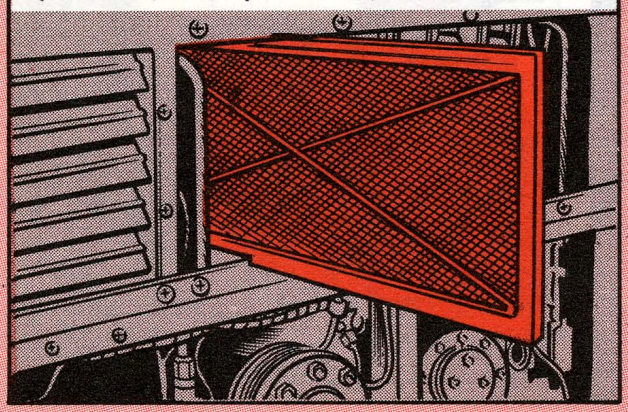
FANS—Bearings unlubed, failed, stuck; cages or blades loose on shafts; blade or louvers bent, striking guards; fan guards or screens coated with guck or trash; screens not fastened right; vents to drive-motors blocked by grime; commutator end of motors dirty, ventilation poor.



RELAYS, SWITCHES—Contact points carboned; mating faces burned or pocked; mounts or connections loose, sparking; insulation cracked, grimy, frayed.

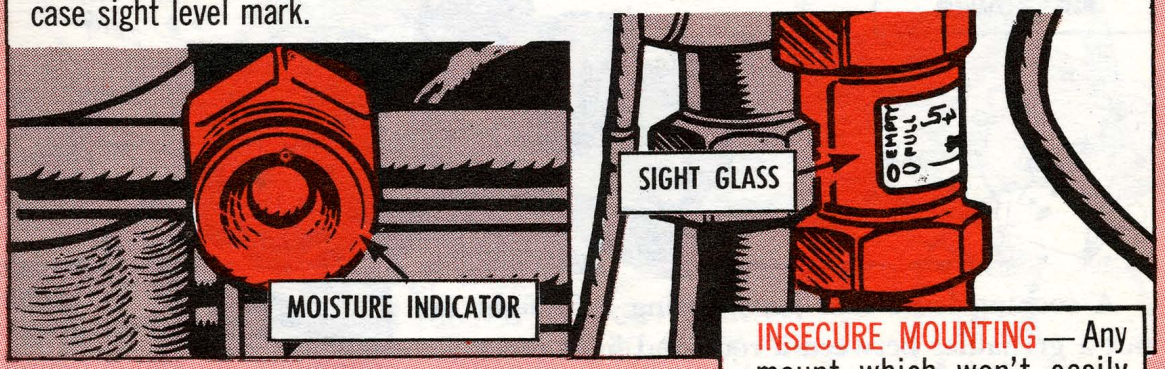


FILTERS—Dirt-loaded, fiber clogged, ice-or-water-logged; case or binding bent so air bypasses it; filter punctured, crushed.

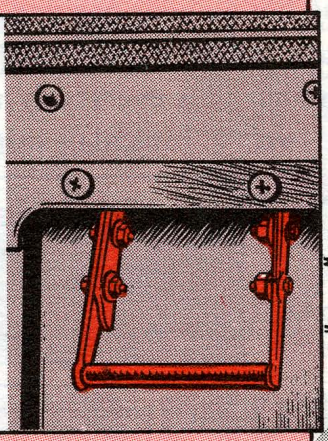


BOOKS—If yours is a military model, see DA Pamphlet 310-4 for the right TM. Then order it if you don't have one. If you've got a commercial model, and you don't have a manual, get a letter off to U.S. Army Mobility Equipment Command, ATTN: AMSME-STD-L, St. Louis, MO. 63120. Be sure to give all details like model, manufacturer, size and contract number.

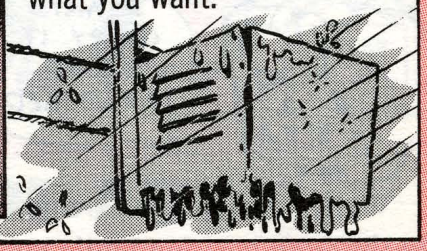
GAGES — Report to direct support if the green dot in your moisture and liquid indicator turns yellow (may be water in refrigerant): if bubbles in the sight glass show refrigerant may have leaked out, or if oil level goes more than ⅛ inch below crankcase sight level mark.



DAMPER — Sticking; control broken, loose, rust-locked. Used to either recirculate the air in a space or bring in outside air, cool it, and exhaust "used" air, or mix the two. In very hot weather, 100 per cent outside air intake can load — and overload — the works. That's how compressors get clobbered.



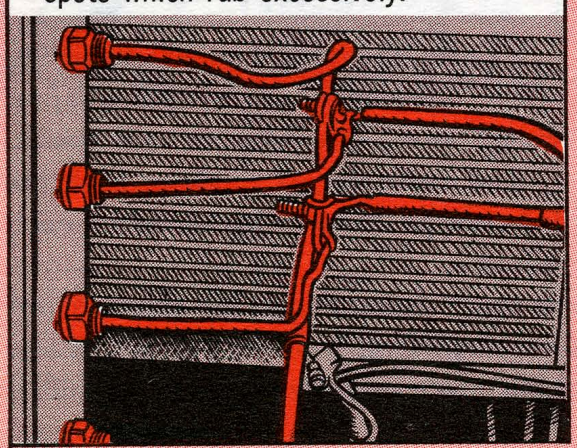
INSECURE MOUNTING — Any mount which won't easily carry the weight of the unit, so it vibrates enough to notice in normal use is no good. A good solid parking place, airtight and weather-tight, is what you want.



100-HOUR CHECK

Whichever comes first, a week on the calendar or 100 running hours, do this:

JOINTS, FITTINGS — Check for leaks, verify tightness (don't overdo!), look for points where chafing or excess wear in refrigerant-carrying or gas-laden lines may cause rupture. Wrap or tie-down spots which rub excessively.



PRESSURE SYSTEM — Physically examine for signs of malfunction. Filter-drier, heat exchanger, expansion valves, evaporator coil and condenser coil, as well as external controls and attachments, must be inspected. If the drier-strainer goes bad, get your direct support wrench wizard to take over . . . same for thermostats. On big units, send old parts to support; they may just be dirty.

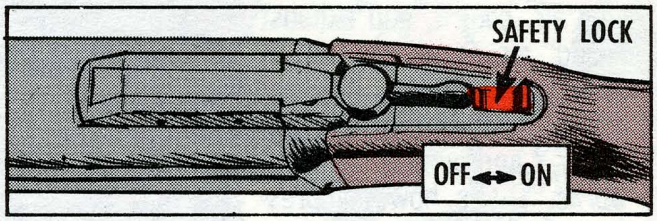
PS END

HEY THERE, GRENADIER!

IS THIS YOUR HANGUP?

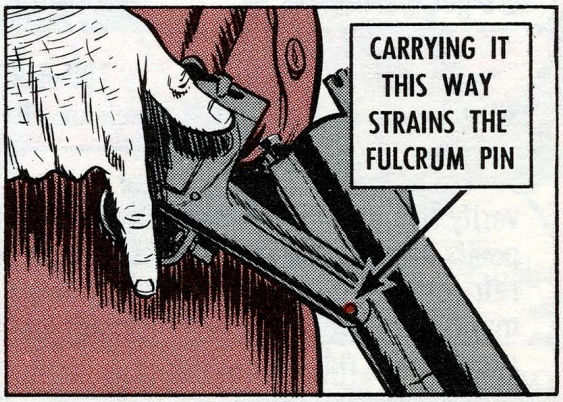
A cocking lever that jams during a firefight can put a grenadier between a rock and hard place . . . and just when the fire's getting hot on your position.

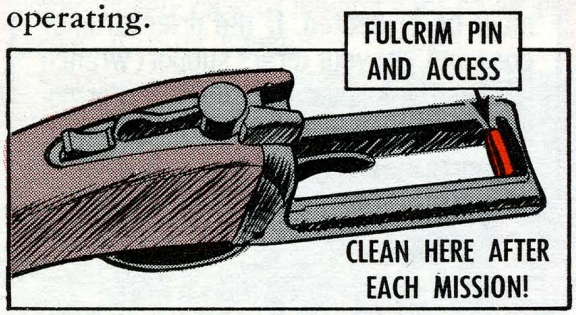
But it's not the M79 grenade launcher's fault. While you're prying that lever back into position, remember that idea everybody had about carrying that weapon shotgun style . . . broken down . . . instead of using the launcher's safety.



Well, whenever this weapon's carried in the open position while you're walking, the barrel can rock back and forth on its fulcrum pin.

Combine this rocking action with a mixture of oil, dust, sand or dirt on the surfaces of both the pin and pin recess —and you've got a real wear pattern operating.



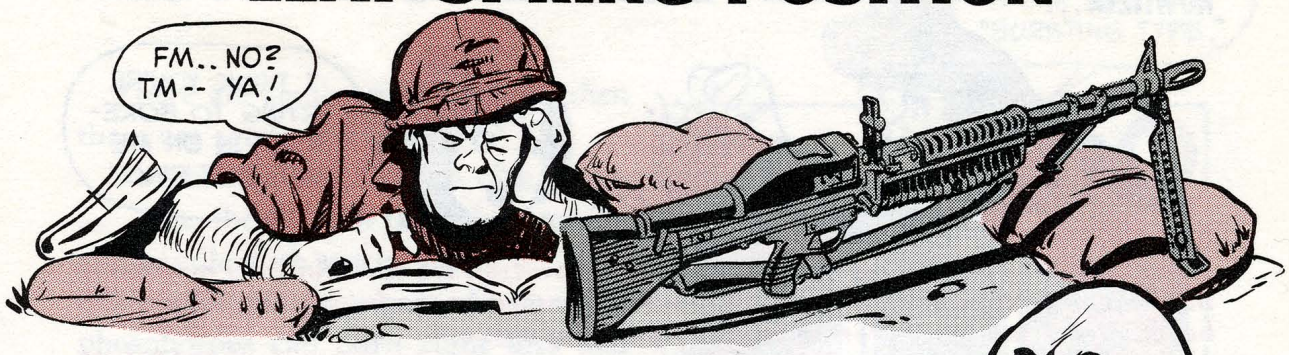


So the sharp grenadier—namely, you—will **always carry the weapon closed and locked** during each patrol.

And never forget to **clean** both the fulcrum pin and its recess **after each mission.**

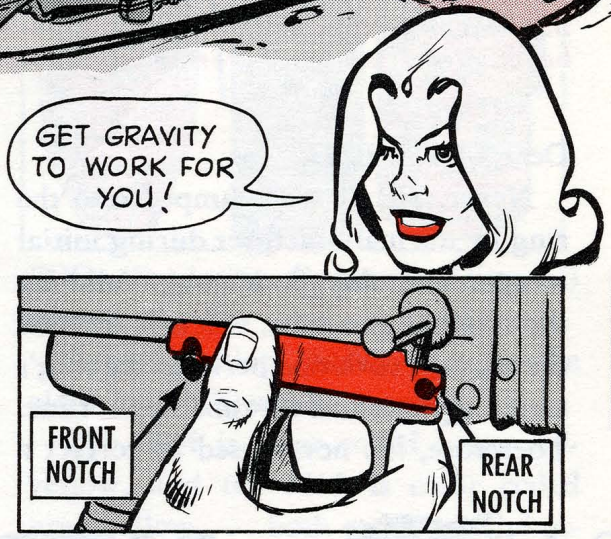
By the way, if you want to check for a worn fulcrum pin or fulcrum pin groove, open the action all the way and move the barrel from side to side. If this lets the cocking lever slip below the cocking arm, your launcher's no-go. It'll have to go back to support for repair.

LEAF SPRING POSITION



In case you're wondering, trigger mechanism **leaf spring** FSN 1005-975-8595 goes on your M60 machine gun like **TM 9-1005-224-10** (Nov 67) shows on page 31 — not like **FM 23-67** (Oct 64) tells it.

When you follow the TM and get the side opening of the spring **facing downward** over the sear pin you get gravity on your side and you won't lose the spring.



KEEP YER SCOPE DRY

Keeping your AN/PVS-2 starlight scope dry is one sure way you can help it keep operating.

Two prime areas for a sop job are the oscillator well and the battery compartment.

Clean and dry them as often as necessary. The weather determines how often, so make regular checks till you get a routine worked out.

Moisture also gets to the styrofoam of the PVS-2 carrying case, so check yours out periodically for rot.

M102 HOWITZER...

FORGET THE RING FACTOR

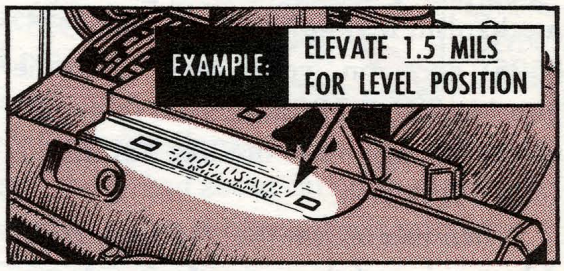
Dear Half-Mast,

My unit recently received the M102 105-MM howitzer. We can't find any mention in the manual on the use of the correction factor stamped on the breech ring. Should this be included in our special corrections during a firing mission?

CPT S. L. H.

Dear CPT S. L. H.

Never, Sir! It was stamped into the ring by the manufacturer during initial weapon assembly. So it's only valid for the original gun tube, where it corrects the angle of variation between the ring's leveling plates and the tube's centerline. Therefore, it's never used to correct a firing command, but may be used to boresight the original tube.

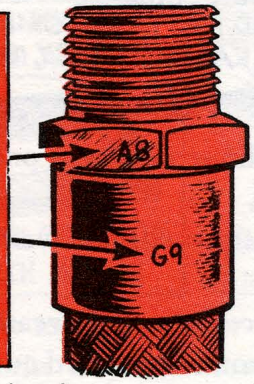


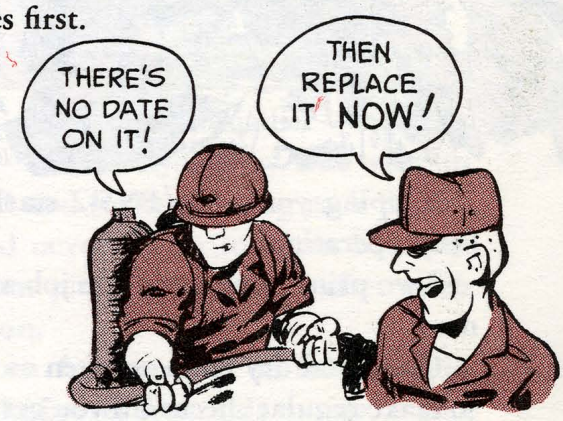
Half-Mast

DATED HOSE

The M8 fuel hose on your M2A1-7 portable flame thrower or your M3 disperser has an age limit. It's 5 years from date of manufacture or 2 years from the date it's issued by the depot—whichever comes first.

The date info is stamped on both couplings on a hose. The letters A through L identify the months — and a number calls out the last digit in the year. The first date stamped on a coupling is the date of manufacture, and the second date shown is the date of issue.

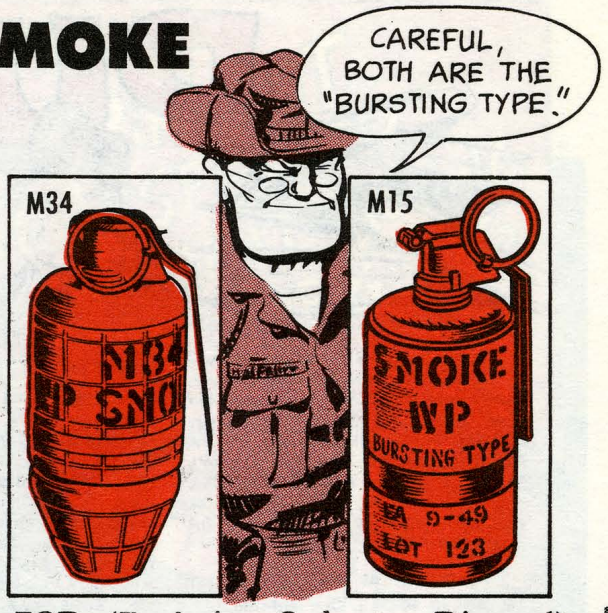




Replace the hose when the time runs out. If a hose doesn't have any date info at all, replace it right now!

WHITE PHOSPHOROUS...

HOT SMOKE



There are smoke grenades and then there are smoke grenades.

You handle 'em all with care, natch . . . but, the M34 WP smoke grenade you handle with special care.

It's a bursting type grenade. Its white phosphorous can burn right into and through your arm, leg or whatever. Its shrapnel (and the WP, too) can zap you up to 35 meters off. So, you don't want **any part** of its fall-out . . . smoke or otherwise.

Like with any other high explosive ammo you have to protect it from hard falls and knocks. Keep it clean and dry. Never use one that's rusty or corroded and never try to clean off more'n dust.

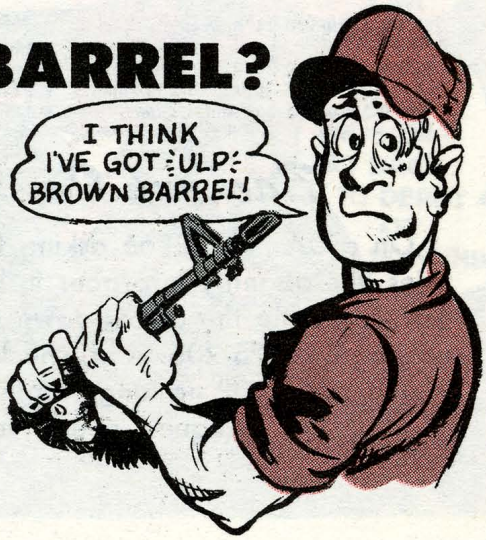
Don't handle duds. Same goes for an M34 WP grenade that's been banged-up or stomped-on. If the outer case should suffer a crack the WP'll start burning soon's the air hits it. The hot stuff may leak out slow-like, but inside the burning WP will soon reach the bursting charge . . . and, P-O-W-I-E, right there. Always report duds and damaged WP grenades to your ammo support or the EOD (Explosive Ordnance Disposal) types.

Same handling cautions go for the older M15 WP smoke grenade.

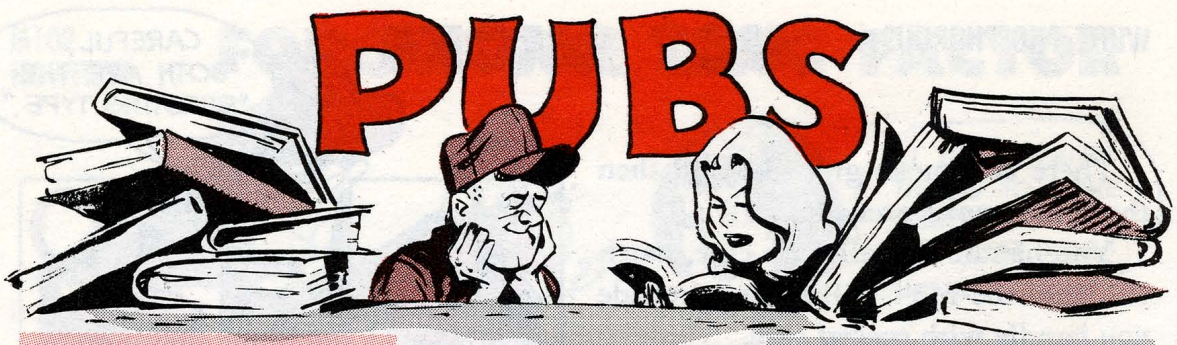
The M34 is color coded green-red-yellow, and the M15 is color coded gray-yellow . . . both codes spell phosphorous-smoke-high explosive.

If a blob of WP gets you, quick-like dunk the skin in water and keep it there until the medics can work on you. The idea is to shut off air to the phosphorous and smother it. But, don't apply oily-base salves. They might dissolve the WP, which can add poisoning to your problem.

GOT BROWN BARREL?



Does your M16A1 rifle have "brown barrel?" It's a highly contagious weapon disease caused by high humidity building up moisture in and outside the barrel . . . or by overheating the barrel with long bursts of automatic fire. Doses of mud and sand in the barrel also help. This disease starts with the disappearance of the barrel's protective coating. It can turn your barrel brown overnight if you skip just one day's lubing.



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Jun 69), and Ch 3 (Dec 69), TM's, TB's, etc.; DA Pam 310-6 (Jul 69), and Ch 3 (Apr 70), SC's and SM's; DA Pam 310-7 (Dec 69), MWO's and DA Pam 310-9 (May 69), COMSEC Pubs.

TECHNICAL MANUALS

TM 3-4230-204-13, Oct, Portable Decon DS2, ABC-M11.
TM 5-2410-204-20P, Dec, D-8 Tractors.
TM 5-3431-221-15, Jan, Welding Mach Arc: Gen, GED 300 AMP.
TM 5-3655-209-15, Jan, Gen Chg Plant Oxygen-Nitrogen.
TM 5-3740-210-20P, Jan, Sprayer Herbicide Helicopter Mtd Pesticide.
TM 5-3805-246-20P, Jan, Grader DED 12 Ft Blade.
TM 5-4110-226-14, Jan, Refrig Unit 10,000 BTU.
TM 5-4120-309-25P, Jan, 6,000-BTU Air Conditioners.
TM 5-4120-310-15, Dec, Air Conditioners 36,000 BTU.
TM 5-4320-243-20P, Dec, Centrif Pumps 500-1400 GPM Petroleum.
TM 5-4930-221-14, Dec, Forward Area Refueling Equip.
TM 5-6675-296-12, Jan, Theodolite, Directional.
TM 5-6675-297-20P, Jan, Theodolite, Directional.
TM 9-1427-380-20P, Dec, Pershing.
TM 9-1430-377-20P/1, Dec, Pershing.
TM 9-1430-377-25P/2, Dec, Pershing.
TM 9-1430-378-20P, Jan, Pershing.
TM 9-1430-380-20P, Dec, Pershing.
TM 9-1430-501-25P, Jan, Hawk AN/TSW-2.
TM 9-1430-560-24/8, Dec, AN/TSQ-51.
TM 9-1440-250-24/2, Jan, Nike-Herc.
TM 9-1450-375-20P/1, Jan, Pershing.
TM 9-2320-246-20P, Dec, Carrier M274A2, M274A3, M274A4, M274A5.
TM 9-2350-217-10, Dec, Howitzer M108 and M109.
TM 9-2350-300-20/1, Dec, Gun AA SP 20-MM, XM163 Radar Set AN/VPS-2.
TM 9-4935-274-25P/1/1, Dec, Nike-Herc.
TM 9-6625-1753-25P, Jan, Nike-Herc Hawk, Pershing, Sergeant.
TM 9-6625-2465-15, Dec, Gun 20-MM XM163 and XM167.
TM 9-6625-2467-15, Dec, Gun 20-MM XM163 and XM167.
TM 9-6625-2469-15, Dec, Gun 20-MM XM167.
TM 10-500-64, Jan, Rigging remote area refuel system on airdrop platform.
TM 10-3930-237-20P, Feb, Gasoline Forklift.
TM 10-8340-219-14, Jan, Tent, Frame Type, Fld Maint Expandable.
TM 11-1510-202-20, Jan, 0-1A, 0-1E, TO-1D.
TM 11-1520-210-20P, Jan, UH-1D.
TM 11-2300-371-15-1, Jan, Instal AN/GRC-163 Trailer, Cargo, ¼ Ton, M416.
TM 11-5820-713-15, Dec, AN/GRC-163.
TM 11-5831-201-20, Jan, Control Intercom Set C-1611D/AIC and Discriminator Discrete Sig MD-736/A.
TM 11-6780-220-12, Jan, OV-1A-1B-1C.
TM 55-1510-204-10/5, Feb, OV-1.
TM 55-2840-234-20P, Jan, CH-47.

ESC's

TM 9-2320-209-ESC, May, Cargo Trk M34, M35, M35A1, M35A2.
TM 11-5805-262-ESC, Jan, SB-22/PT.
TM 11-5810-244-ESC, Jan, TSEC/KY-28.

MODIFICATION WORK ORDERS

9-1400-425-30/1, Dec, Redeye.
9-1440-301-30/49, Jan, Sergeant.
9-2320-244-20/1, Feb, M715 and M725 1¼-Ton Vehicles.
9-4931-294-50/7, Jan, Tunable Synchronizer LFE 243A.
9-4935-304-30/14, Feb, Sergeant.
9-4935-306-40/2, Feb, Sergeant.
55-1500-210-30/4, Jan, CH-47.
55-1510-205-30/6, Feb, U-1.
55-1520-209-30/92, Feb, CH-47.
55-1520-210-30/24, Jan, UH-1D.
55-1520-210-30/25, Jan, UH-1D.
55-1520-210-40/2, Jan, UH-1D.
55-1520-221-30/21, Jan, AH-1G.
55-1520-221-30/26, Feb, AH-1G.
55-1520-221-40/4, Dec, Instal XM-35 Arm Sub-Sys AH-1G and TH-1G Helicopter.
55-1520-224-20/1, Feb, Instal Air Damper in Eng Oil Pump Outlet Line OH-13E and G Helicopters.
55-1520-224-40/1, Jan, OH-13.
55-1520-228-30/3, Mar, OH-58.

MISCELLANEOUS

AR 735-35 C4, Mar, Property Accountability
DA Cir 20-22, Mar, Inspection Security of Arms and Ammunition.
DA Pam 310-1, Dec, MWO's.
FM 6-38, Jan, Sergeant.
LO 3-1040-224-12, Dec, AN-M4 3½ CFM Flame Thrower Compressor.
LO 5-3805-240-12-1 and 12-3, Dec, Ditching Machine.
LO 9-2320-218-12, Dec, M151, M151A1, M151A1C, M718.
SC 2090-97-CL-E04, Jan, Alum Craft Repair Kit.
SC-5180-95-CL-A50, Jan, Tool Kit AA Mech.
SC 5180-95-CL-A51, Jan, Tool Kit Turret Mech.
SC 5180-97-CL-E08, Jan, Intrench Outfit, Inf.
SC 5180-97-CL-E11, Oct, Tool Kit Pioneer Engr Platoon.
SC 5821-91-CL-E04, Feb, Maint Kit Electron MK-693/A.
TB 9-2320-260-20/1, Feb, G908-series 5-ton trucks (M813 cargo truck, etc.)
TB-750-243-4, Jan, Maint Expenditure Limits For Missiles.

Back-up One

On a DA Form 2765 asking for supplies, the quantity info goes in block L. So please slip the arrow down a block on page 59, PS 206. And, check to see your supply SOP no longer calls for fill in block P. A request needs your IPD only.

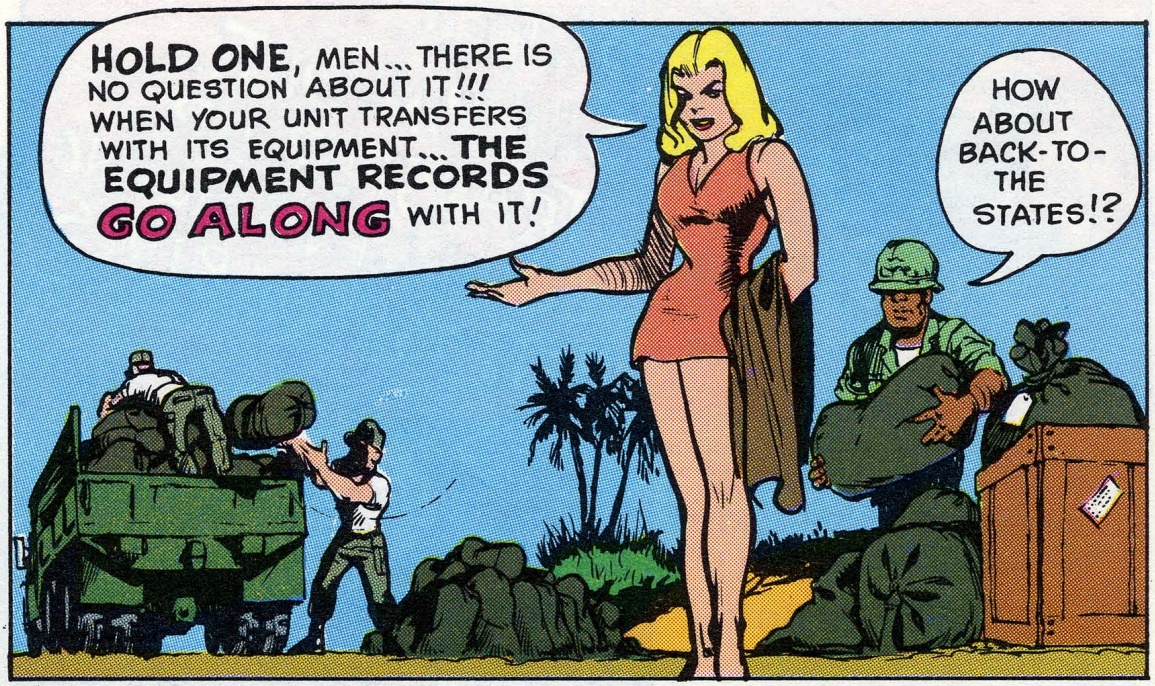
Hold EIR Exhibit!

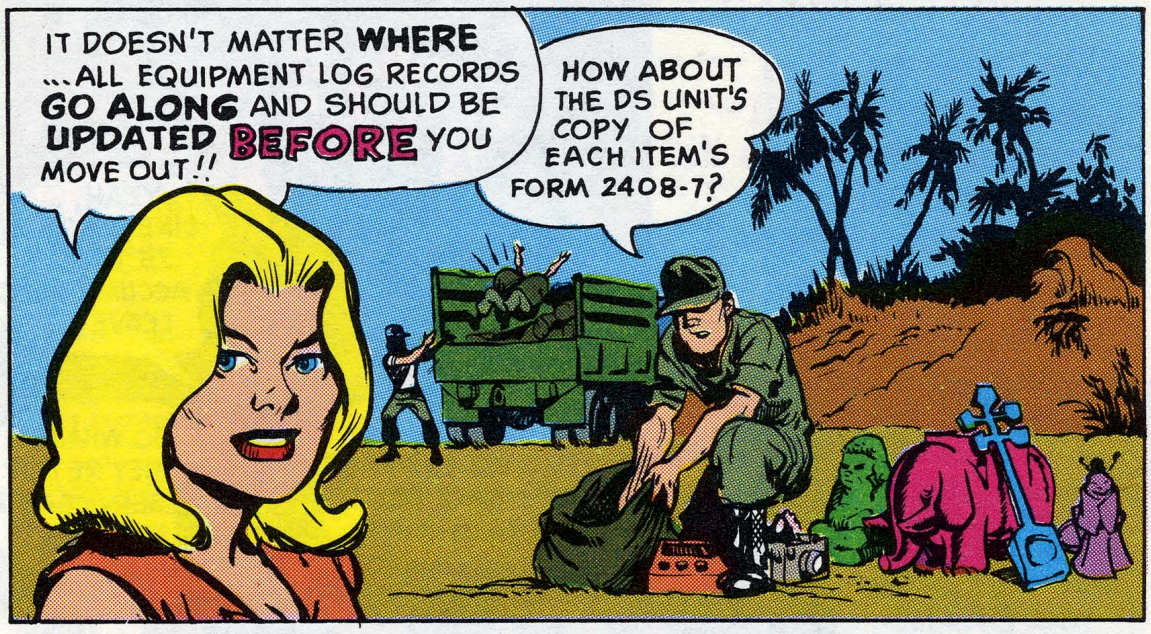
No matter what you read — or hear on a hot-air wave, you TAG and HOLD all EIR exhibits till the NMP calls for 'em. Tag 'em with DA 2402 — marked with the control number of your EIR, DA 2407 — and **wait for word** on disposal. See paras 3-2 and 3-7.4.1A of TM 38-750.

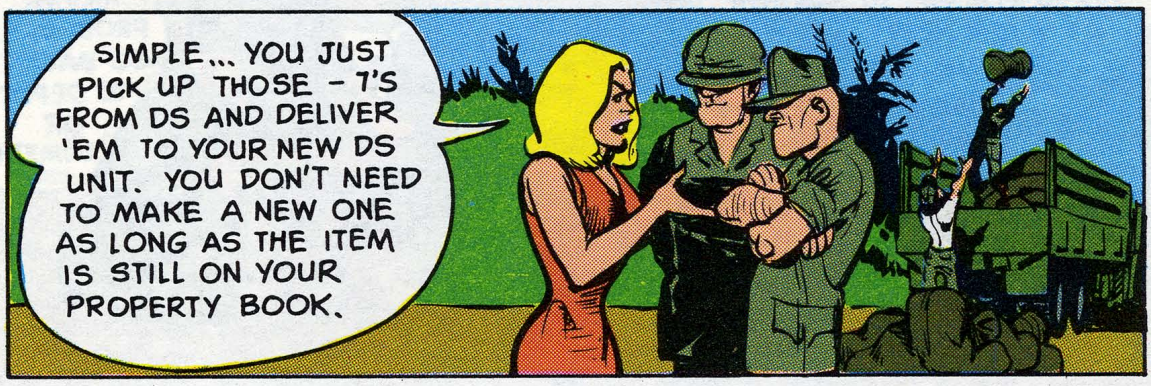
JOE'S DOPE

OH, THEM SHIPPIN'-OUT... TRANSFER-UP... ...EQUIPMENT-MOVING RETROGRADE BLUES

Oh, When Johnny comes marching home again
HURRAH, HURRAH!
Or when outfits ship to parts unknown
HURRAH, HURRAH!
They'd best be sure they're on the ball—
Their equipment has its log and all!
So, they won't be sad
When... Johnny
Comes marchin' home.


HOLD ONE, MEN... THERE IS NO QUESTION ABOUT IT!!! WHEN YOUR UNIT TRANSFERS WITH ITS EQUIPMENT... THE EQUIPMENT RECORDS GO ALONG WITH IT!
HOW ABOUT BACK-TO-THE STATES!?


IT DOESN'T MATTER WHERE ...ALL EQUIPMENT LOG RECORDS GO ALONG AND SHOULD BE UPDATED BEFORE YOU MOVE OUT!!
HOW ABOUT THE DS UNIT'S COPY OF EACH ITEM'S FORM 2408-7?


SIMPLE... YOU JUST PICK UP THOSE - 7'S FROM DS AND DELIVER 'EM TO YOUR NEW DS UNIT. YOU DON'T NEED TO MAKE A NEW ONE AS LONG AS THE ITEM IS STILL ON YOUR PROPERTY BOOK.

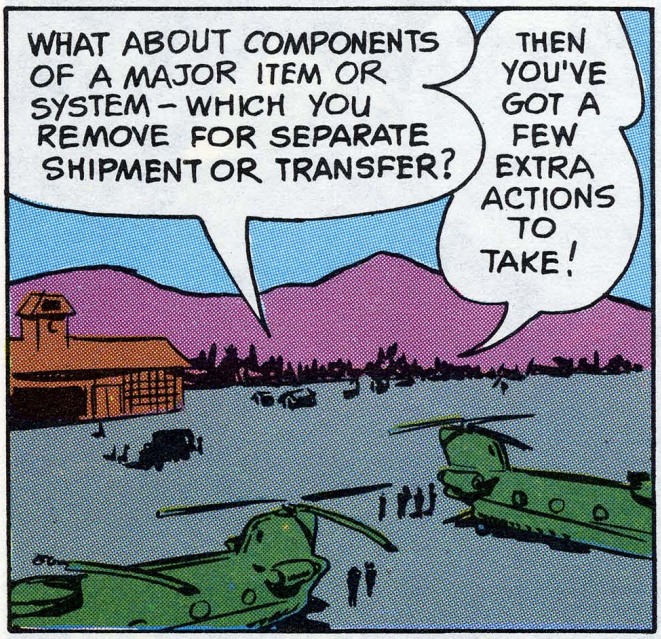
SUPPOSE THE EQUIPMENT'S GOING SOMEWHERE ELSE ... LIKE A DEPOT, OR TO ANOTHER OUTFIT, OR SOME OTHER UNKNOWN PLACE?
IN THAT CASE THE RULES ARE DIFFERENT!
FIRST YOU MUST MAKE OUT A NEW DA 2408-7 FOR EACH ITEM INDICATED IN THE APPENDIX E OF TM 38-750.
NORMALLY THESE WILL BE ITEMS THAT NOW HAVE A LOG COPY OF DA 2408-7!
RIGHT!
SO, YOU DISTRIBUTE COPIES OF THE NEW FORM THE WAY TM 38-750 TELLS YOU ... BUT YOU MAKE SURE YOU TAKE OUT THE OLD DASH 7 IN THE LOG AND PUT IN THE NEW ONE YOU'VE MADE OUT!
THEN THE ENTIRE EQUIPMENT LOG PLUS ITS DD 314 GOES WITH THE EQUIPMENT— IF IT'S SHIPPED WITH ALL COMPONENTS INSTALLED!
LET'S POST THIS PIN-UP SOMEWHERE.

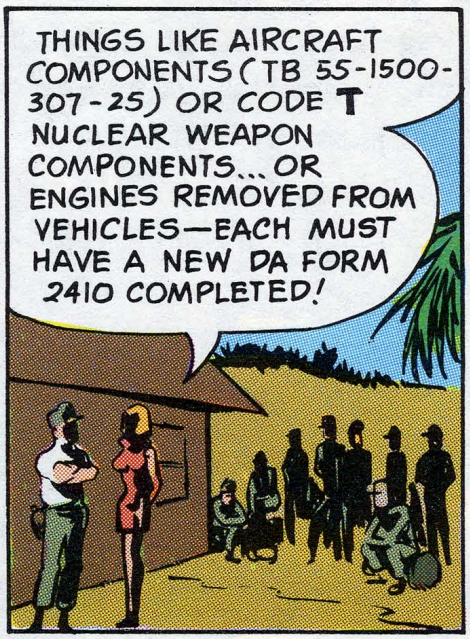
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BUL

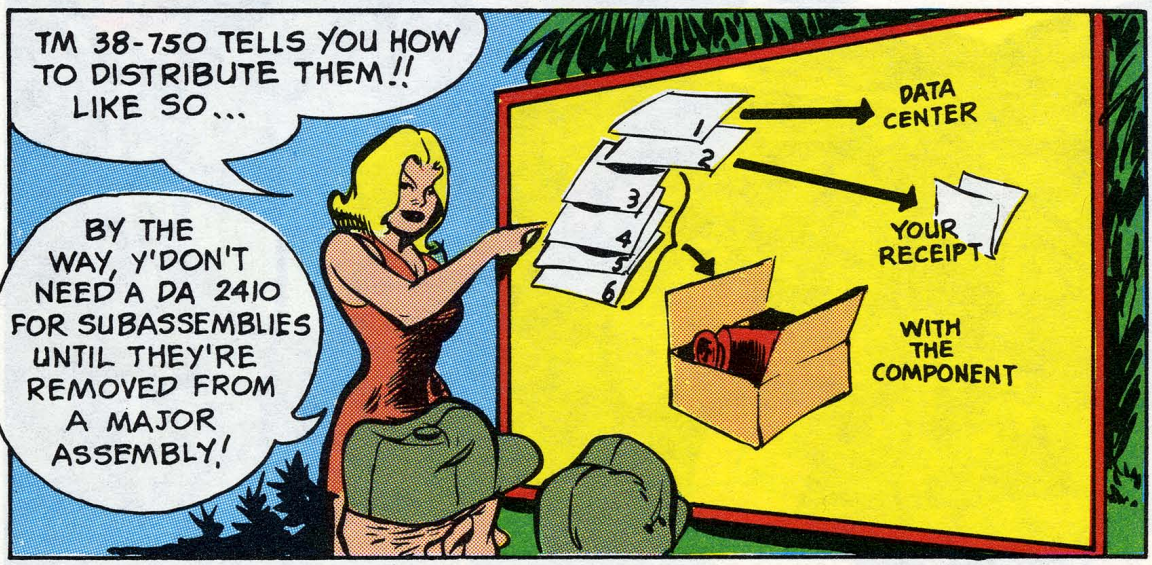
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

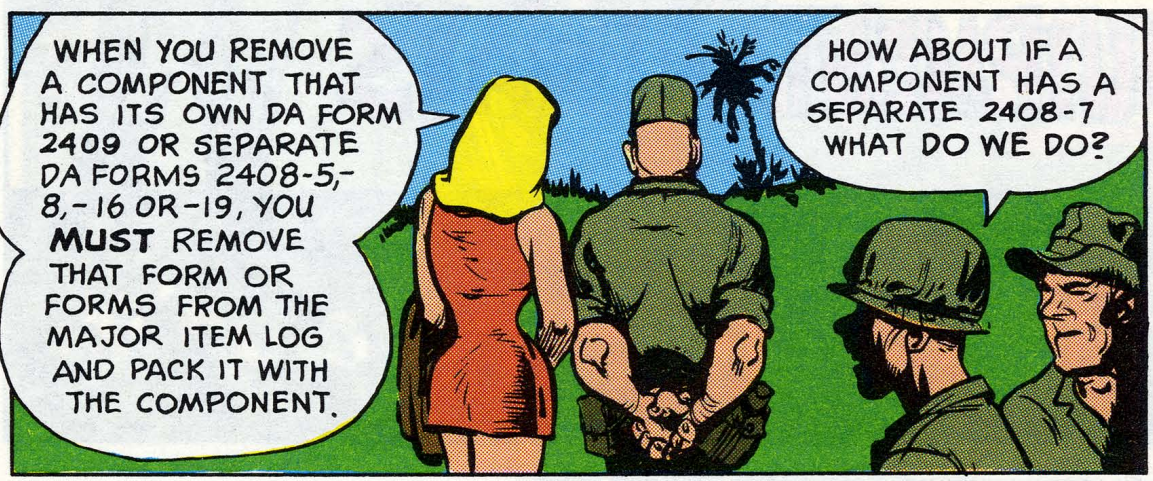
QUIPMENT . . . *Take care of it*

LLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

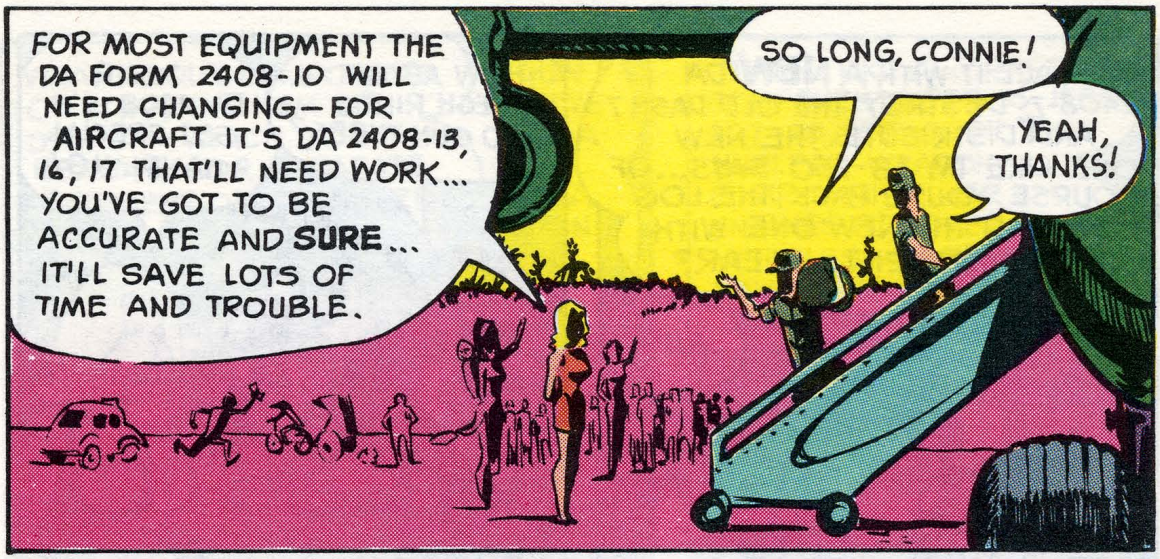

WHAT ABOUT COMPONENTS OF A MAJOR ITEM OR SYSTEM - WHICH YOU REMOVE FOR SEPARATE SHIPMENT OR TRANSFER?
THEN YOU'VE GOT A FEW EXTRA ACTIONS TO TAKE!


THINGS LIKE AIRCRAFT COMPONENTS (TB 55-1500-307-25) OR CODE T NUCLEAR WEAPON COMPONENTS... OR ENGINES REMOVED FROM VEHICLES—EACH MUST HAVE A NEW DA FORM 2410 COMPLETED!

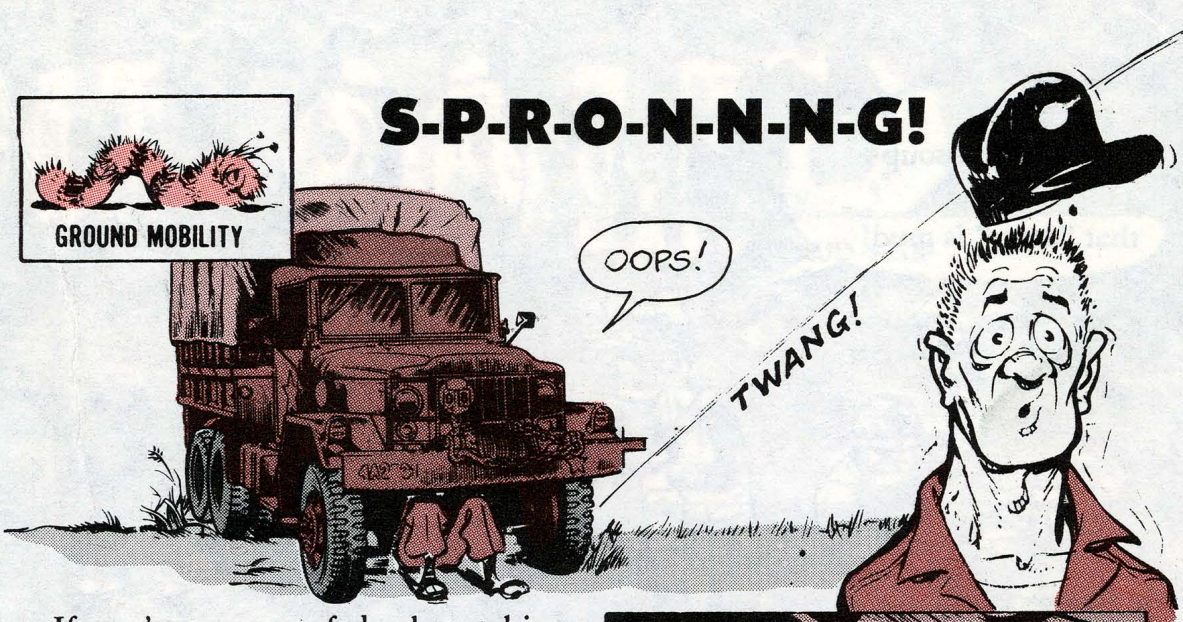

TM 38-750 TELLS YOU HOW TO DISTRIBUTE THEM!! LIKE SO...
BY THE WAY, Y'DON'T NEED A DA 2410 FOR SUBASSEMBLIES UNTIL THEY'RE REMOVED FROM A MAJOR ASSEMBLY!
1
2
3
4
5
6
DATA CENTER
YOUR RECEIPT
WITH THE COMPONENT


WHEN YOU REMOVE A COMPONENT THAT HAS ITS OWN DA FORM 2409 OR SEPARATE DA FORMS 2408-5,-8,-16 OR-19, YOU MUST REMOVE THAT FORM OR FORMS FROM THE MAJOR ITEM LOG AND PACK IT WITH THE COMPONENT.
HOW ABOUT IF A COMPONENT HAS A SEPARATE 2408-7 WHAT DO WE DO?

REPLACE IT WITH A NEW DA 2408-7, DESTROY THE OLD DASH 7 ... AND DISTRIBUTE THE NEW ONE LIKE TM 38-750 SAYS... OF COURSE YOU'LL PACK THE LOG COPY OF THE NEW ONE WITH THE COMPONENT... CLEAR?
YUP!
HOW ABOUT BREECH RINGS AND GUN TUBES?
THEIR DA 2408-4'S GET SPECIAL HANDLING!
WHEN YOU REMOVE THE RINGS AND TUBES FROM A WEAPON — MARK "Removed from Weapon" IN COLUMN 'H' AND SEND THE-4 TO U.S. ARMY WEAPONS COMMAND!
WHERE D Y'GET THE ADDRESS?
IN TM 38-750.
BUT, FIRST... TRANSFER ALL THE BORESCOPE AND RECOIL EXERCISE INFO, BREECH RING SERIAL NUMBER AND RETUBINGS 'N' SUCH ONTO A NEW DA 2408-4. PACK THE NEW FORM WITH THE TUBE!
ANYTIME YOU REMOVE COMPONENTS FOR SHIPMENT... CAREFUL... YOU'LL PROBABLY NEED ENTRIES ON THE LOG FORMS THAT REMAIN WITH THE MAJOR ITEM!


FOR MOST EQUIPMENT THE DA FORM 2408-10 WILL NEED CHANGING—FOR AIRCRAFT IT'S DA 2408-13, 16, 17 THAT'LL NEED WORK... YOU'VE GOT TO BE ACCURATE AND SURE... IT'LL SAVE LOTS OF TIME AND TROUBLE.
SO LONG, CONNIE!
YEAH, THANKS!

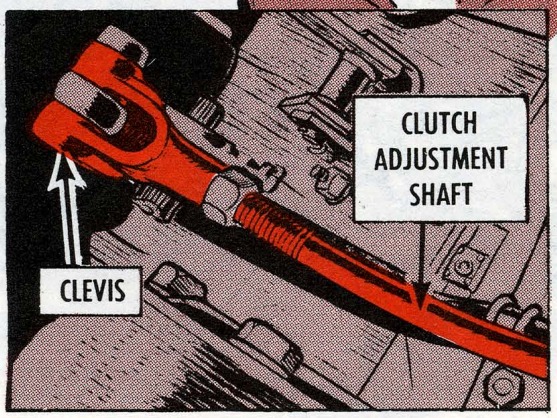
HAW, LITTLE DOES SHE KNOW...WE SHIPPED OUT MOST EVERYTHING DAYS AGO.
HAH, WE DIDN'T DO HALF THEM THINGS!
BIG WASTE OF SWEAT ANYWAY!
A MONTH OR SO LATER
WHAT A MESS!
SARGE, SOMETHIN' TERRIBLE'S HAPPENED! WE GOT ALL OUR OLD EQUIPMENT BACK!
BUT IT'S IN TERRIBLE SHAPE. THERE ARE NO LOG BOOKS OR FORMS WITH ANYTHING.
OH MY ACHIN' BACK! THAT CRUMMY 105 WE GOT RID OF IS BACK ON OUR HANDS AGAIN!
YEAH, AND WE CAN'T BEGIN TO PROCESS THEM FOR REPAIR BECAUSE WE GOT NO RECORDS ON 'EM.
FORT HARDKNOCKS

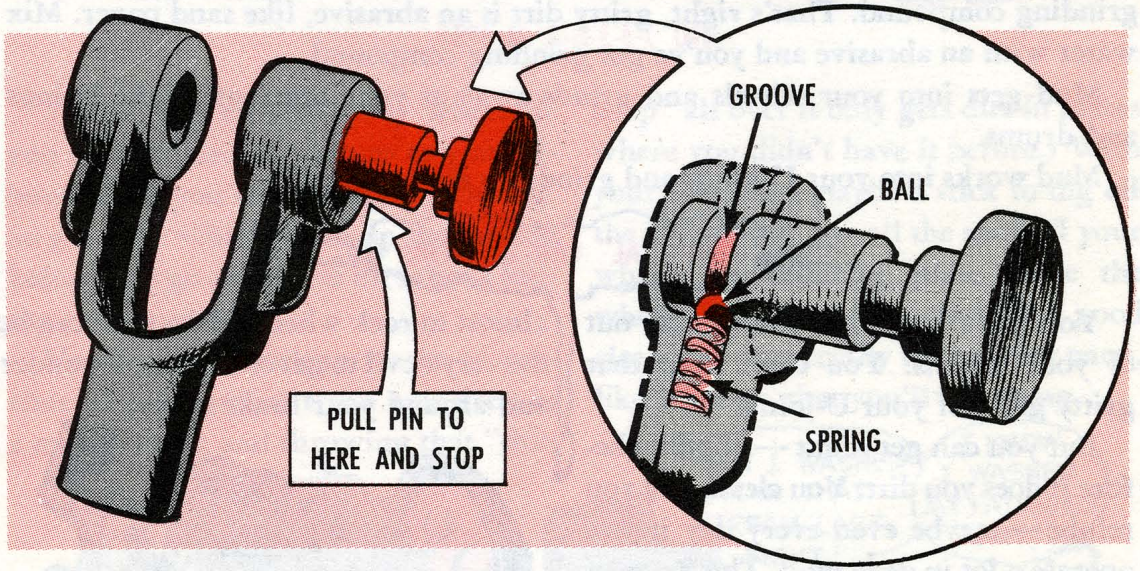


If you've ever goofed when taking down the clutch adjustment shaft on a 2-1/2-ton or 5-ton truck, this's not for you—you've already learned the hard way.

Here's a tip for you other guys that can save a lot of trouble when you're removing that shaft:

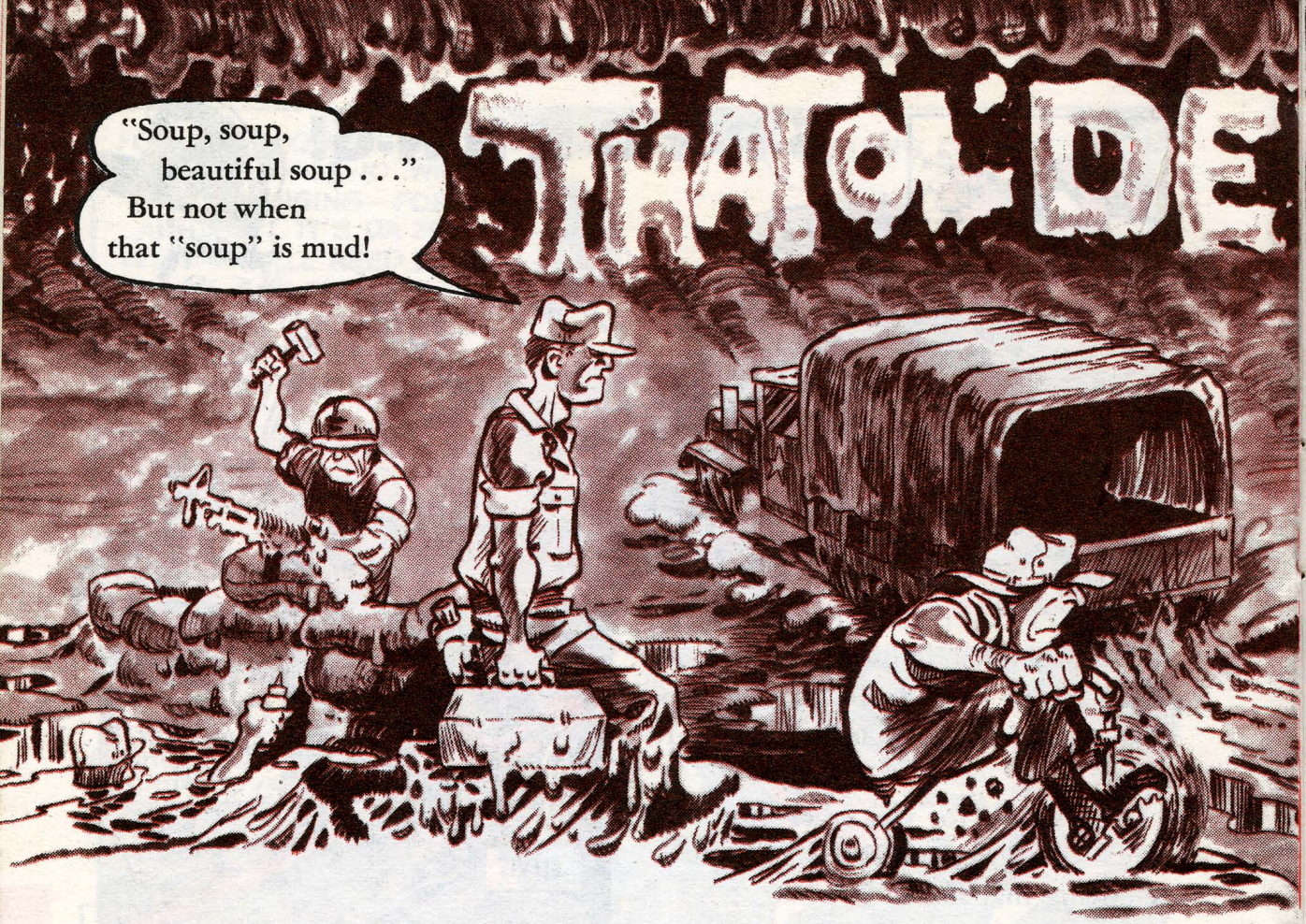
Do not pull the pin all the way out of the clevis.





There's a little ball and a spring in there. They'll take off like they were fired from a rifle. If you're lucky enough to find 'em, you'll have a tricky job getting 'em back in the clevis—kinda like stuffin' a wet noodle up a wild cat's nose.

Just pull the pin out until the ball and spring engage in the groove at the end of the pin. That's enough to take the shaft down.



When you operate a wheeled vehicle in soupy mud, you're sloshin' around in grinding compound. That's right, gritty dirt is an abrasive, like sand paper. Mix water with an abrasive and you've got grinding compound.

Mud gets into your wheels and grinds away at your bearings, brake linings and drums.

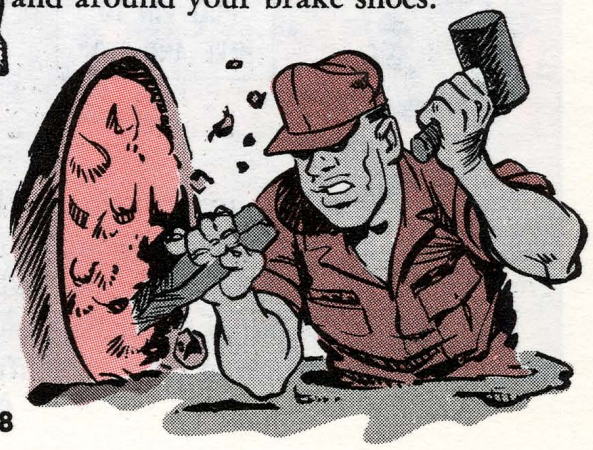
Mud works into your U-joints and grinds up the bearings.

"UNUSUAL" CAN BE USUAL

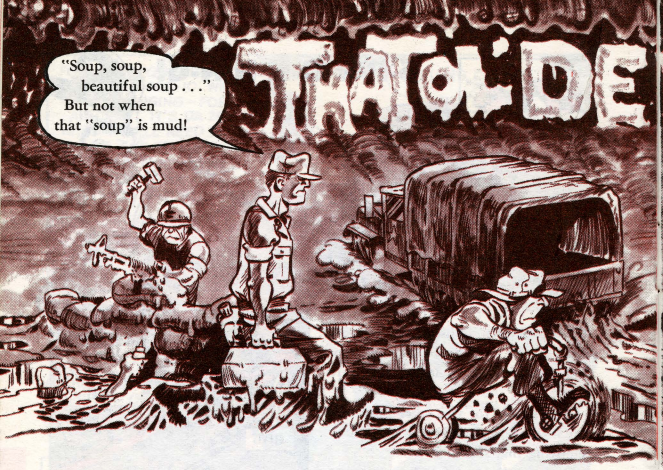
You can't keep that soupy stuff out of your wheels. You can't keep that gritty glop off your U-joints.

But you can get it out — or off — before it does you dirt. You clean, and you relube — maybe even every day if you operate a lot in deep mud. This's one of those "unusual conditions" your LO and TM talk about, so you clean and relube "more often."

The sooner you get after that mud, the easier it'll be. Some mud hardens almost to rock when it dries — it can be the very devil to get off, especially under and around your brake shoes.



THAT OL' DE VIL MUD



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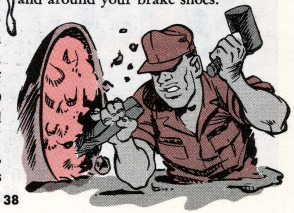
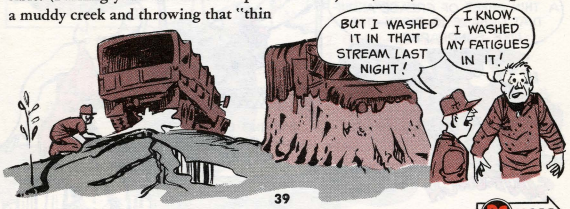


TAKE IT A-A-L-L-L OFF

You're just spinnin' your wheels if you mess around in dirt up to your elbows while you're cleaning and lubing. So get your vehicle clean on the outside before you go after that dirt that's hiding on the inside.

Use a hose and clean water, if possible. (Parking your truck axle-deep in a muddy creek and throwing that "thin soup" all over it only gets dirt in places where you didn't have it before.) With your hose, and maybe a stick to dig off the heavy stuff, get all the mud off your wheels and backing plate. Give the whole underside of your vehicle a good cleaning — especially the moving parts, like U-joints, that you'll be lubing.



PS MORE

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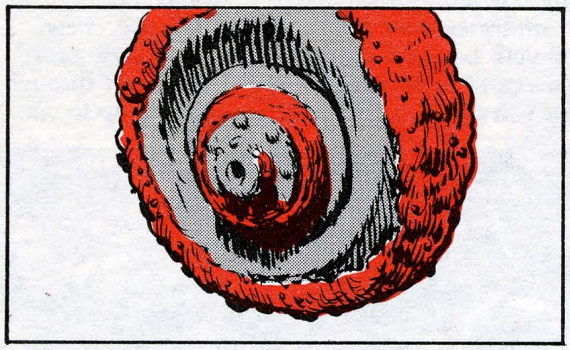
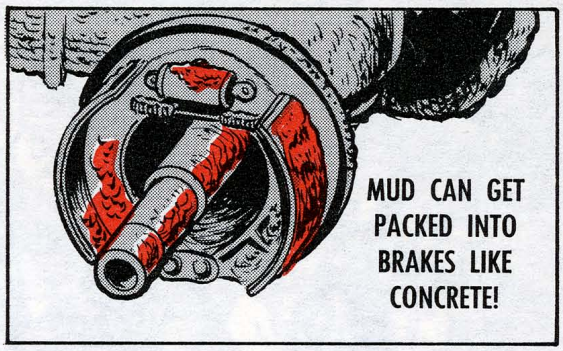
PS MORE

INSIDE STORY

Would you believe wheels packed solid inside with mud? It happens — and that's what you could find when you pull your wheels.

You may have to use your hose to blast the mud out of your brakedrums and from around your brake shoes. Then wipe out your brakedrums with a clean, dry cloth.





An air hose is a help in drying off your brake shoes and the inside of the backing plate.

Clean and dry!

GREASE 'N' GRIT

Did you ever stop to think that your whole truck — from the axles up — rides on a film of grease thinner than a sheet of paper? That's all there is between your wheel bearings and the bearing cup they roll against.

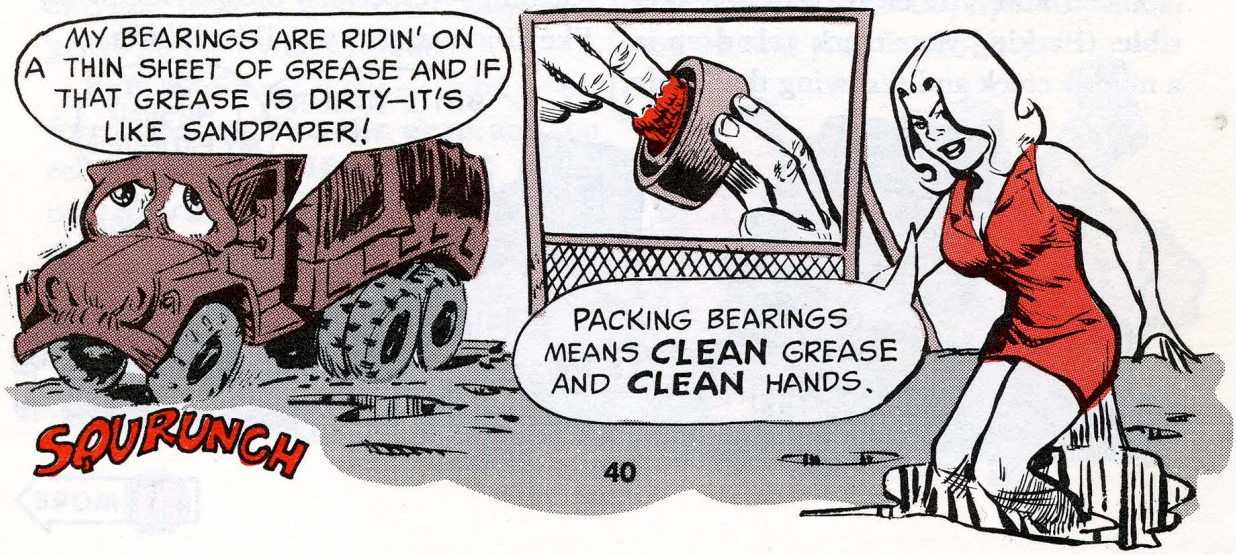
So you can see what happens if there's grit — even fine dust — in that thin film of grease. Your bearings and bearing surfaces won't last long under the weight, heat and grinding.

That's why you have to clean your bearings and those other parts absolutely spic 'n' span.

That's why you've got to be mighty careful no dirt gets into your lube cans and lubing equipment.

That's why you clean your hands before packing clean lube into clean bearings.

Like a baby's bottom — clean, dry and greased.

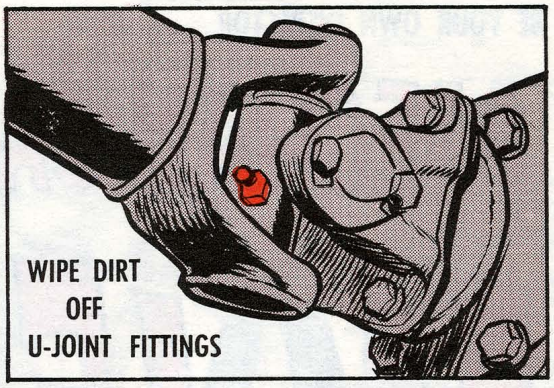


U-JOINTS, TOO

You're doing your prop shaft U-joints no favors if you feed 'em dirty grease.

So keep a clean rag handy and wipe off the lube fittings before puttin' the grease gun to 'em.

And make sure you hit all the lube fittings — check your LO.

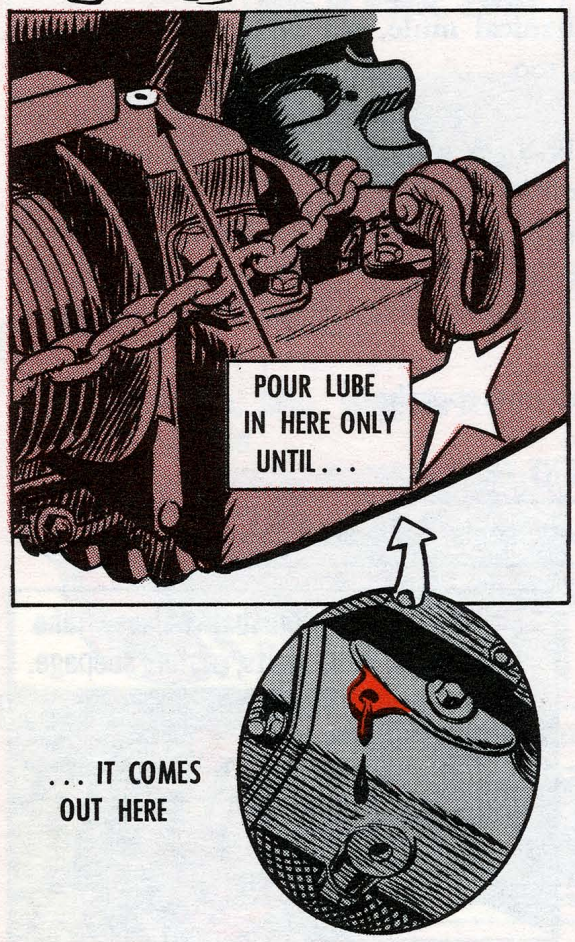


A LITTLE DAB'LL DO YA — IN

Like a chain's no stronger than its weakest link, just one pooped-out bearing in your prop shafts or wheels is all it takes to bring your truck to a grinding halt.

And a little dab of dirt — like mud — is all it takes to . . . ZAP . . . that . . . one . . . bearing . . .

WHEN IS FULL?



"Full" does not always mean smack dab to the top of whatever you're filling.

Like most gear cases.

Especially like the gear case on your front-mounted winch. If you see gear oil leaking from a winch, there's a good chance someone has overfilled it.

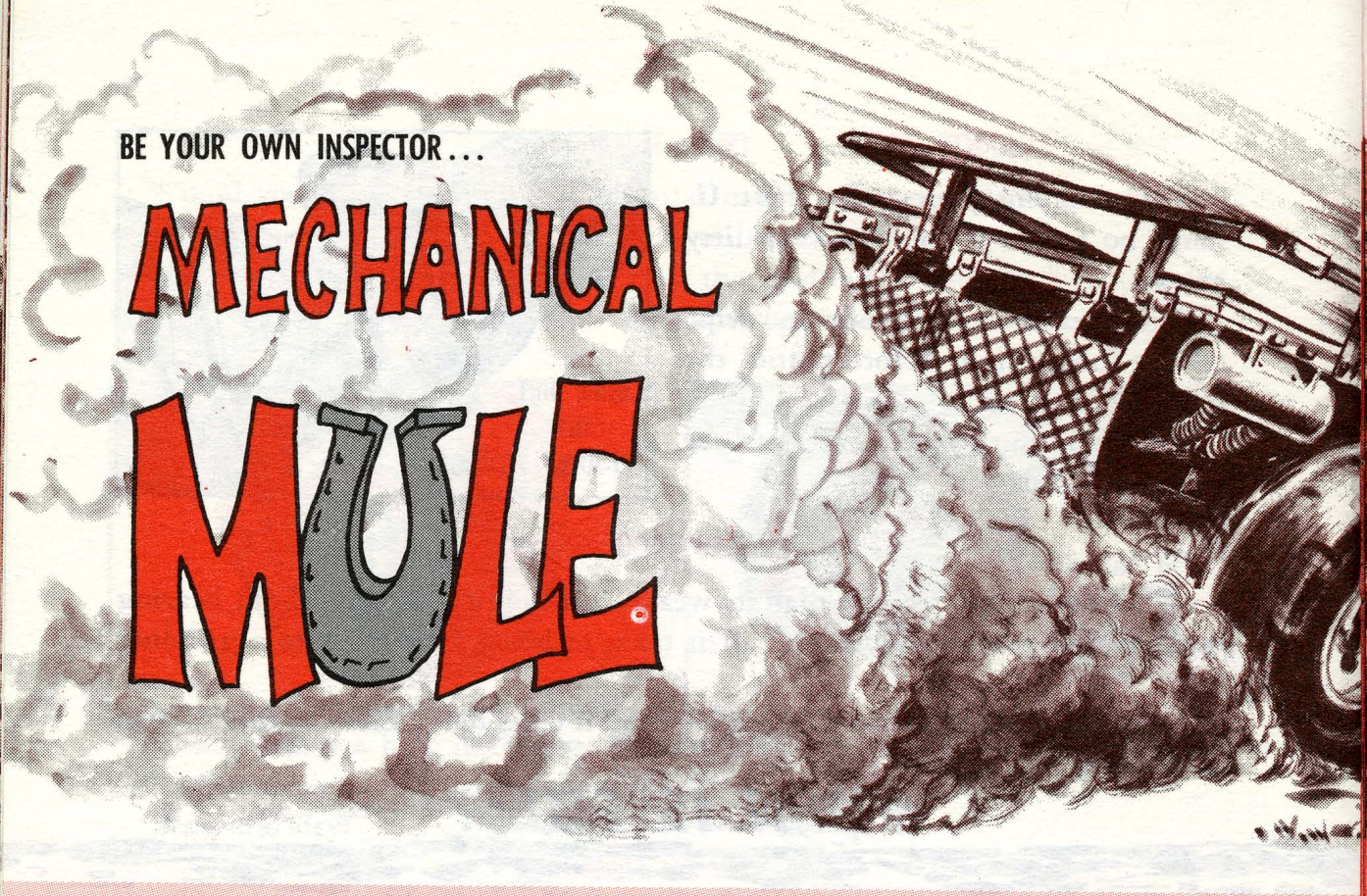
He took out the fill-hole plug and started dumping in GO — and kept right on dumping until it topped off at the fill hole. That's too much! That's the wrong way.

The right way is:

1. Take out the check-hole plug.
2. Check the lube level. If GO is needed —
3. Take out the fill-hole plug.
4. Pour GO in the fill hole.
5. **Stop as soon as oil starts coming out the check hole.**
6. Put the plug back in the check hole.
7. Put the plug back in the fill hole.
8. Give yourself a pat on the back — for doin' the job right.

BE YOUR OWN INSPECTOR...

MECHANICAL MULE



With your mighty M274-series mechanical mule, it's the little things that count. And these can make or break you, too.

Your only insurance is good PM care.

With this policy, your 1/2-ton, 4x4 platform utility truck can go just about anywhere, do almost anything—then be ready for more.

First, you gotta know the items that can go haywire fast—like the operating controls, their cables and some engine parts.

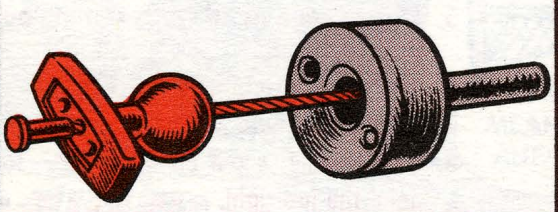
Use common (mule) sense and eyeball this inspection guide. The real serious faults are printed in **bold face type.**

Be sure you fix them before you hit the trail together.

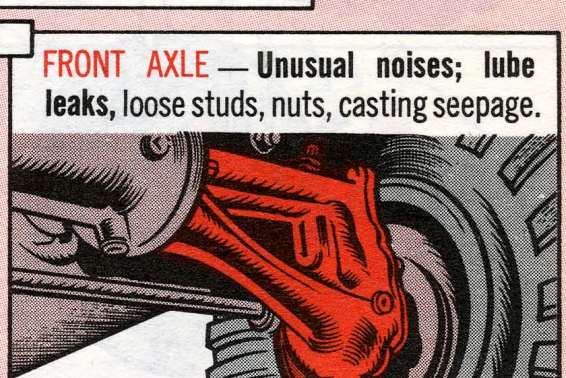
THE UP-FRONT CHECK

☐ OVERALL LOOKS — Dirty, rust spots, dents. **Split seams.**

☐ STARTER HANDLE AND CABLE—**Broken,** kinked, rusty, **worn.** (Pull straight out, hold onto handle until retracted.)



☐ FRONT AXLE — **Unusual noises; lube leaks,** loose studs, nuts, casting seepage.



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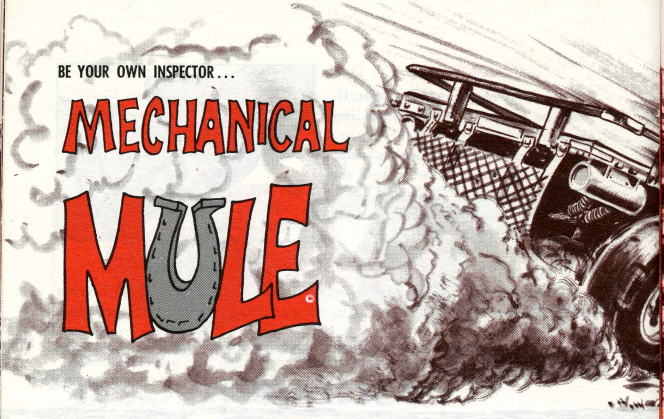

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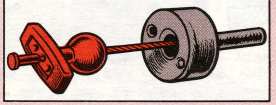

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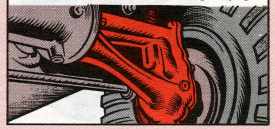
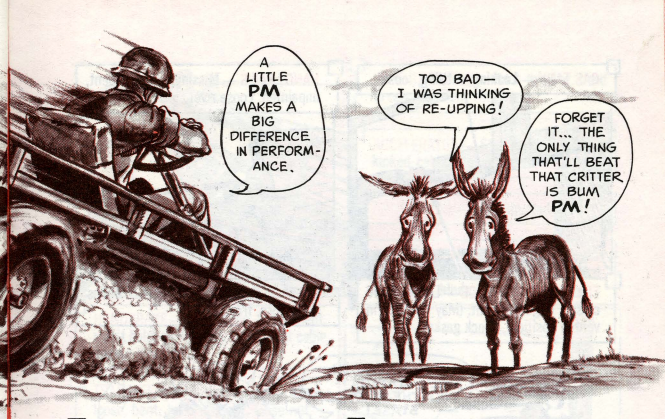
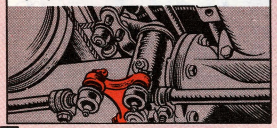




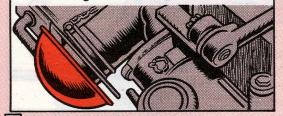
BELLCRANK — **Loose in mount. Safety pin parts missing.**



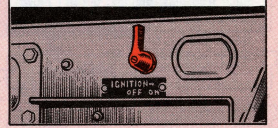
FOOT REST ANCHOR BOLT — **Missing, broken.** (Should be hand tightened.)

FOOT RAIL — Bent, loose, **missing.**

RAIN DEFLECTOR AND PRECLEANER— **Missing, loose, bent, clogged,** broken or missing chain.

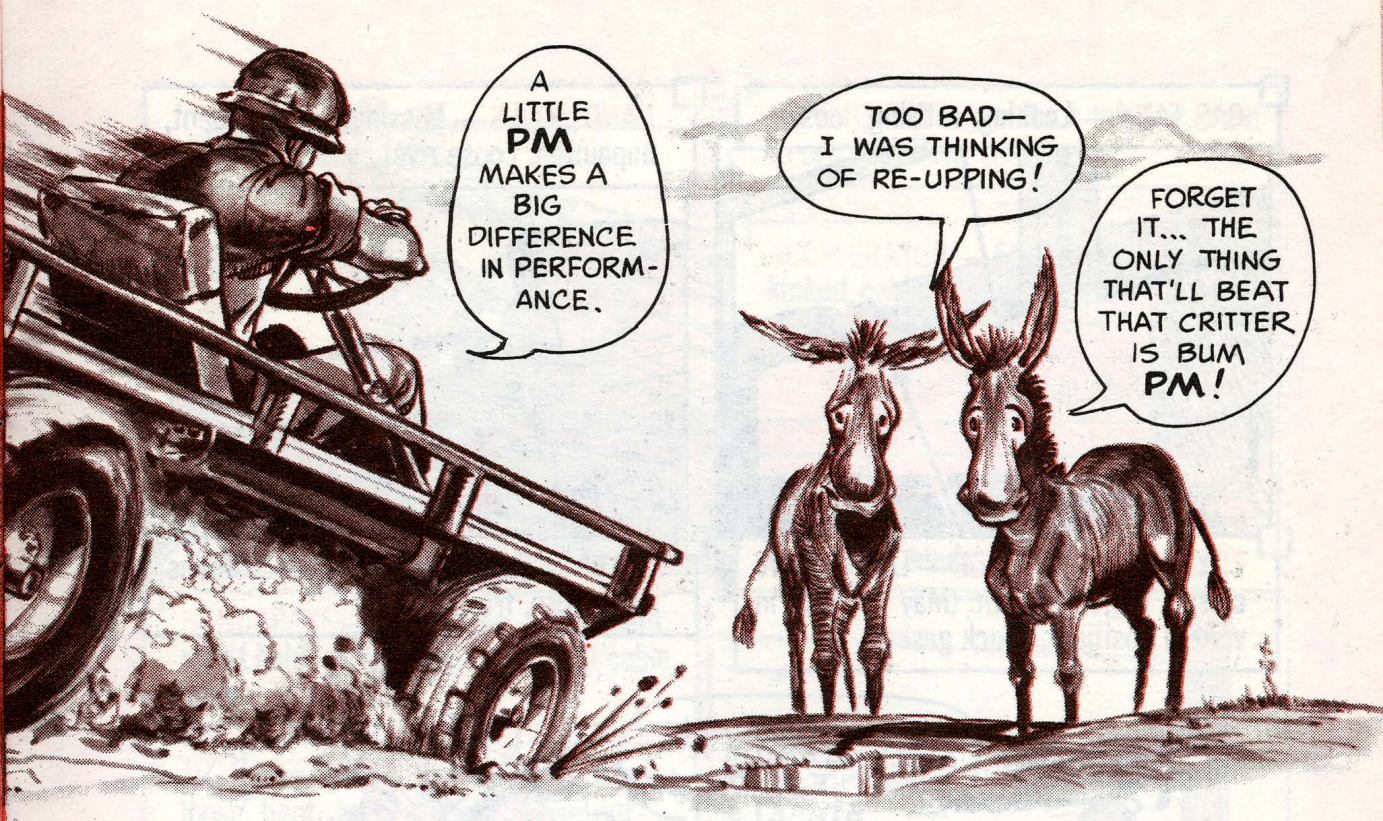


IGNITION SWITCH — **Loose, broken.** (Check wire terminal.)



DATA PLATES — Not readable, painted over (these rust easily). Loose rivets.

PS MORE



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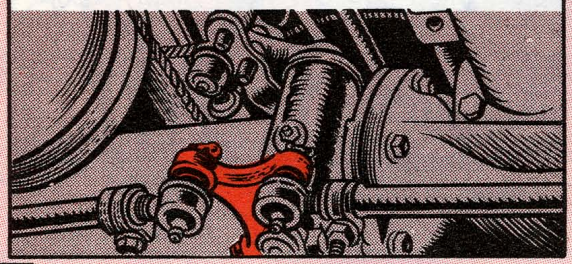

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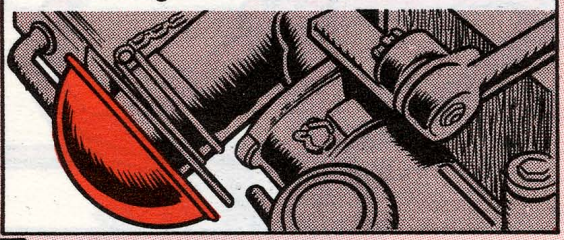
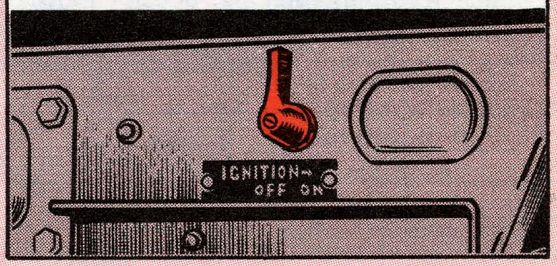
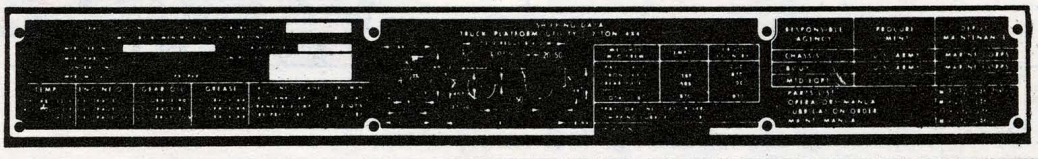


☐ IGNITION SWITCH — **Loose, broken.** (Check wire terminal.)

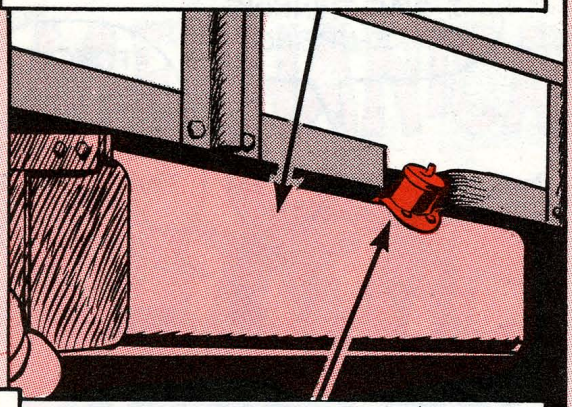


☐ DATA PLATES — Not readable, painted over (these rust easily). Loose rivets.



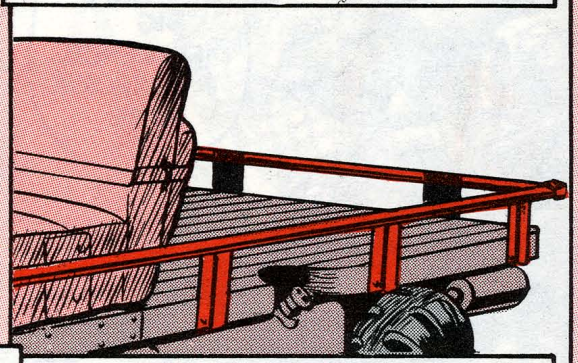
PS MORE

GAS TANK — **Leaking,** rattling, loose.

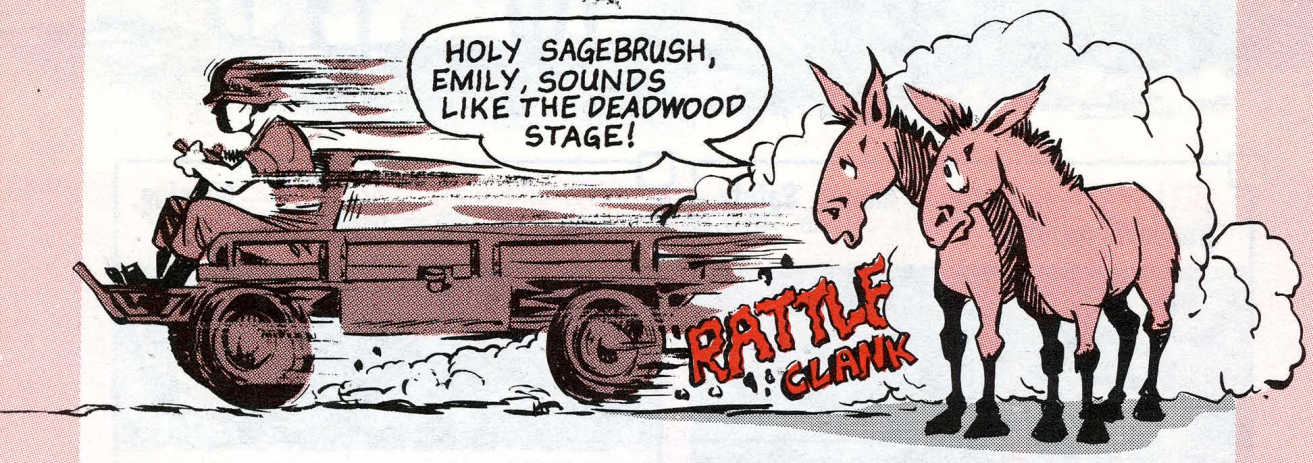


FILLER CAP AND GAGE — Leaks. **Valve closed.** Gage rod bent. (May not vent in vented position), check gasket.

HAND RAILS — **Missing,** loose, bent, unpainted. Loose rivet.



SEAT — Loose mountings; cushions worn, torn, frayed.

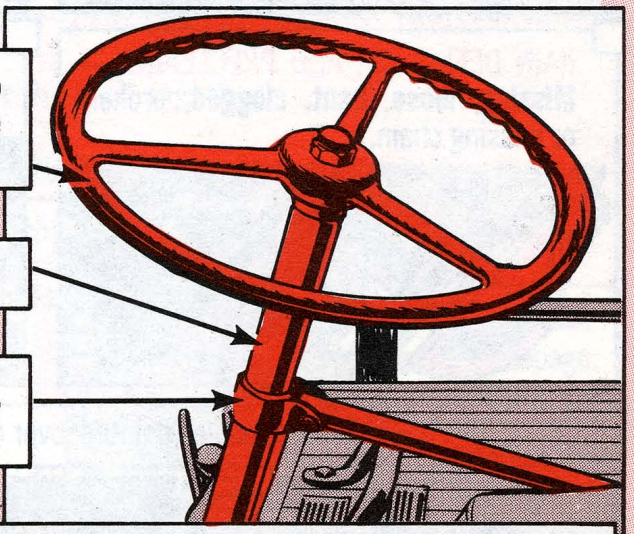


CHECK ON THE CONTROLS

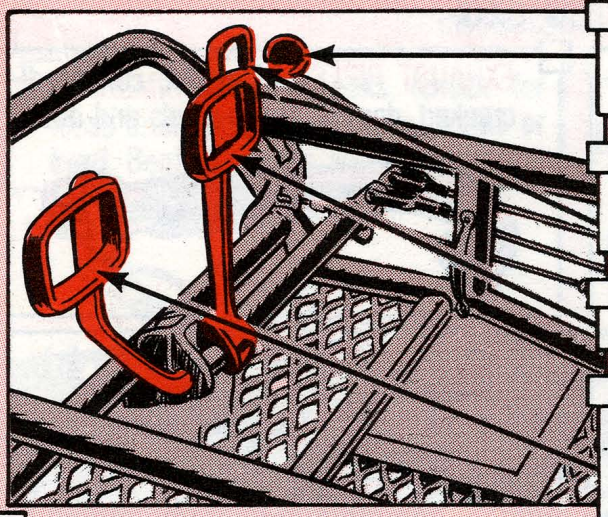
STEERING WHEEL — Bent, **loose,** too much free play, **binding;** doesn't move forward.

STEERING COLUMN — Dented, bent.

STEERING COLUMN BRACE — Missing, doesn't hold. (Tighten knob firmly.)



TWO-TO-FOUR-WHEEL STEER PIN — **Broken,** rusted, cracked (all late models except M274A5). Check for broken and/or lost safety chain.



☐ HAND THROTTLE — Knob missing. Hard to operate. Bent shaft.

☐ ACCELERATOR — **Sticks,** loose, binding, kinked cable. (Lubricate.)

☐ BRAKE PEDAL — Not adjusted, bent.

☐ CLUTCH PEDAL — Too much free play (should travel free 3/4 inch, grabs, chatters, **slips, binds.** Do not ride pedal.

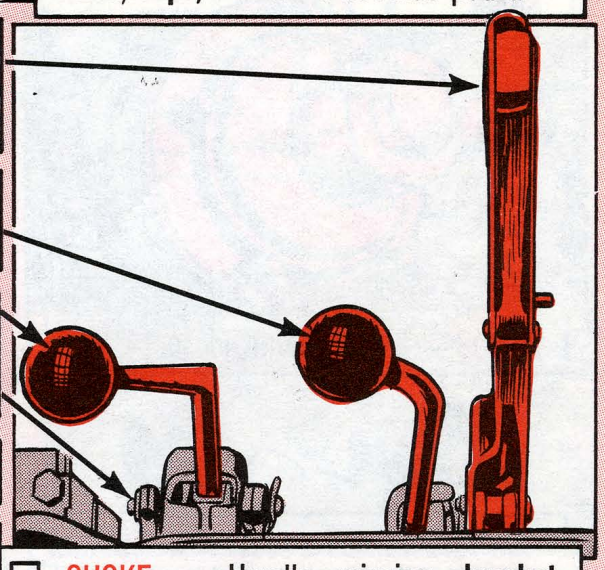
☐ HANDBRAKE — Bad cable adjustment, **won't hold;** cable rusty, worm, bent cable anchor bracket.

☐ TRANSFER GEARSHIFT LEVER — **Stuck,** loose, bent; knob missing, loose nut.

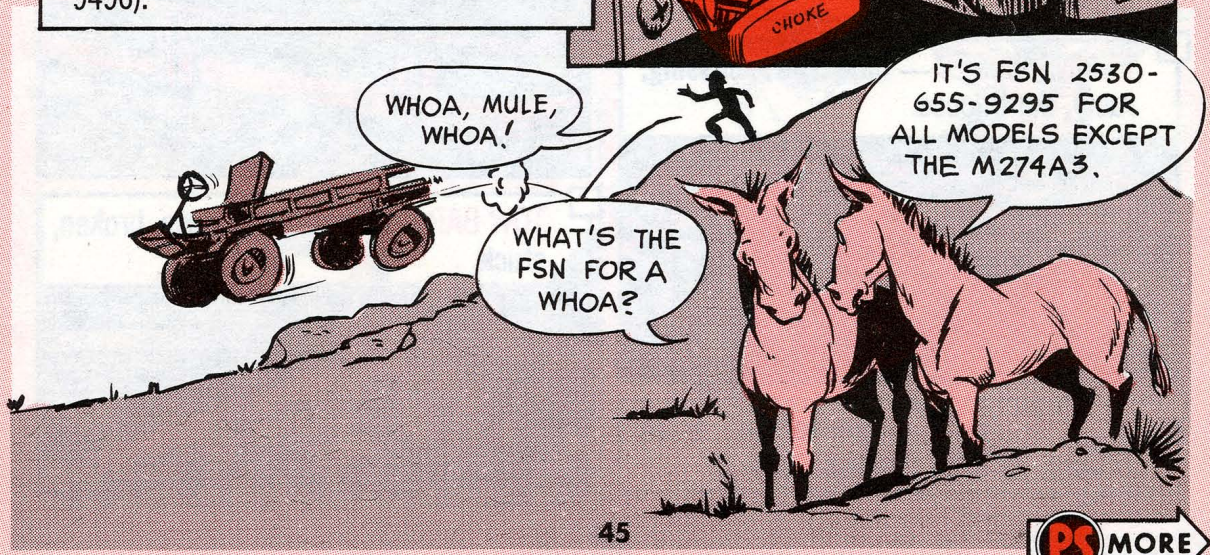
☐ TRANSMISSION SHIFT LEVER — **Stuck,** loose, bent, knob missing. Bent shift rod. Replace brackets if sprung.

☐ ACCELERATOR LINKAGE — Bent, **sticks.**

☐ HAND BRAKE CABLES — Rusty, **worn,** loose, **kinked.** To replace hand brake cable use FSN 2530-655-9295 for all models except M274A3 (FSN 2530-711-8369). Clamp or yoke (FSN 5340-865-9496).

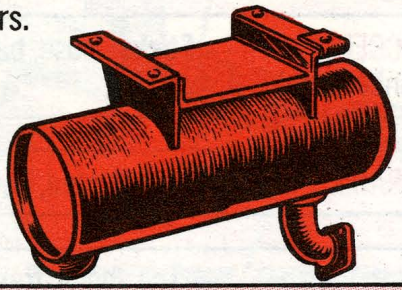


☐ CHOKE — Handle missing, **bracket loose,** screws missing.

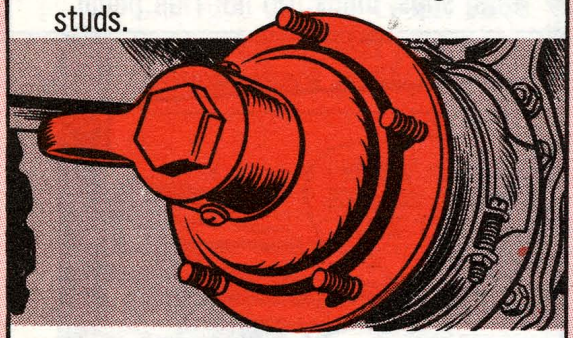


P.S MORE

MUFFLER — **Holes,** noisy. Exhaust pipe connections loose. Loose bracket fasteners.



WHEEL HUBS — Lube leaking. Loose studs.

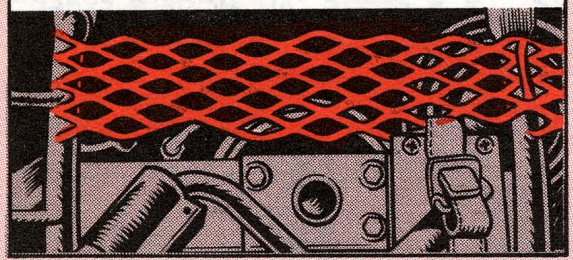


STUDS — **Broken, bent,** loose.

RIM AND AXLE FLANGE WASHER AND NUTS — **Missing,** loose, rims dented.

FRAME — **Bent,** cracked, side rails and cross members loose. Nuts and bolts loose.

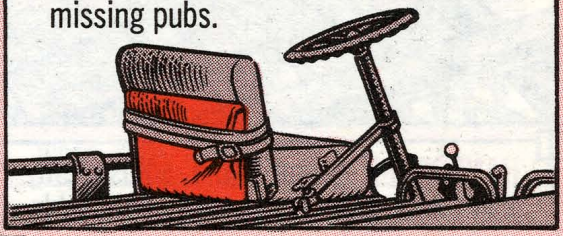
ENGINE GUARD — **Capscrews missing,** rusty, bent, loose.



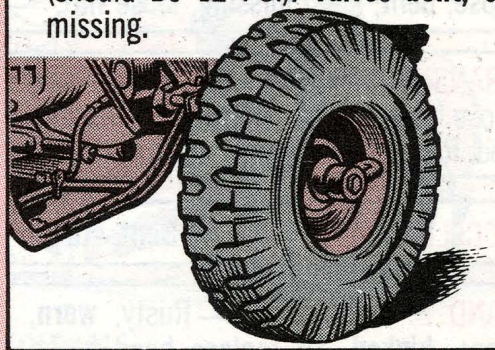
HOURMETER — Disconnected, wires broken. Internal damage (Gears).

EXHAUST PIPES — **Clogged,** collapsed, cracked, dented. Loose studs and nuts.

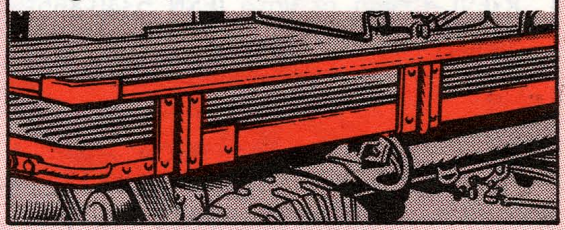
PUBLICATIONS BAG — Worn, dirty, missing pubs.



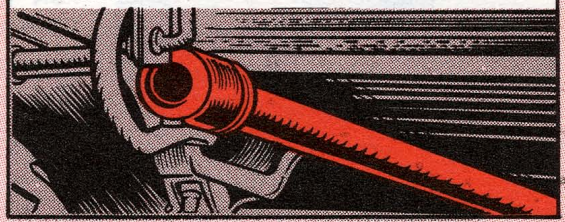
TIRES — **Tread worn smooth, fabric cuts,** uneven wear. **Incorrect pressure** (should Be 12 PSI). **Valves bent,** caps missing.



BODY BOLTS AND MOUNTINGS — **Missing,** loose, cracked. Cracked welds.



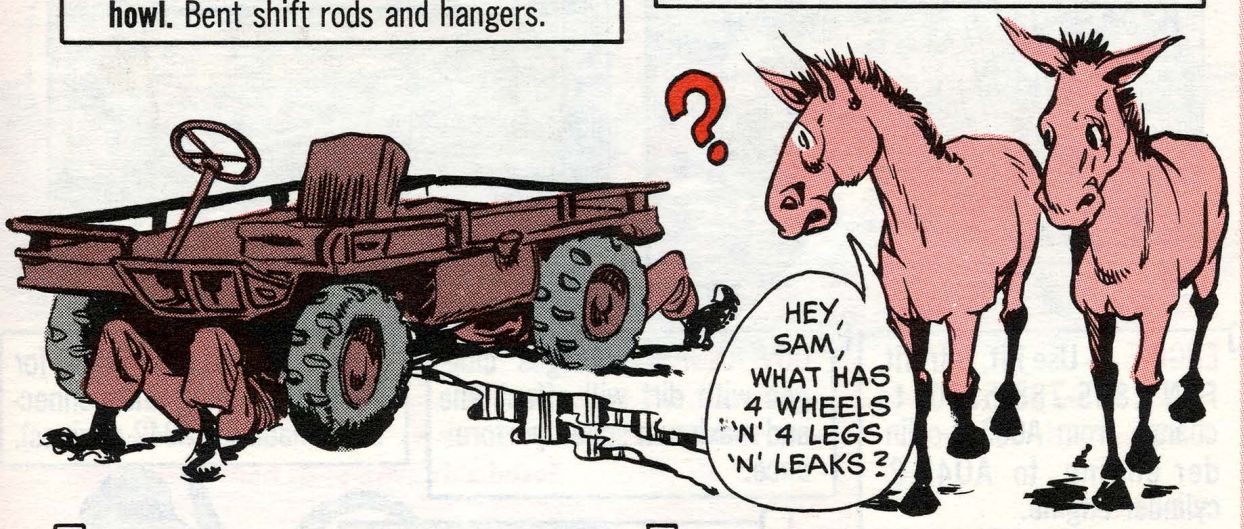
TOW BAR — Support clip loose, broken, stuck.



UNDERNEATH CHECK-UP

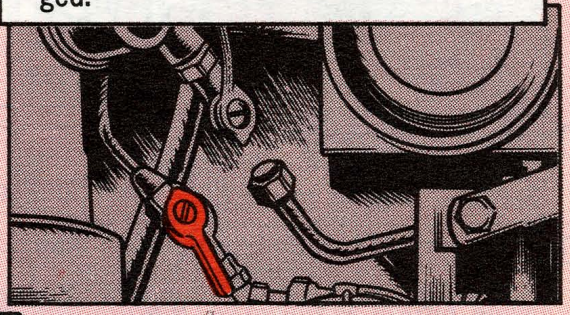
TRANSMISSION — **Leaks** (check for loose drain plug). Bolts loose. **Whine or howl.** Bent shift rods and hangers.

OIL SEALS — **Leaks.** (Use special tools for installation of components.)

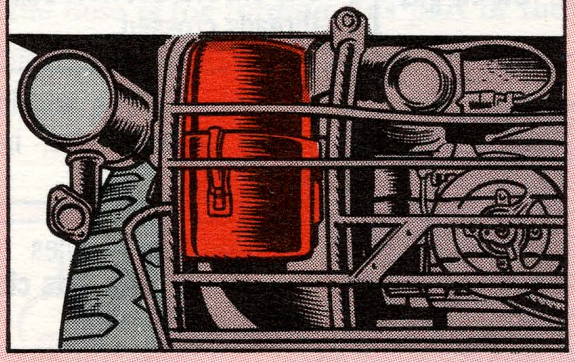


UNIVERSAL JOINTS — **Loose, worn.** No lube.

FUEL SHUT-OFF VALVE — **Leaks,** clogged.

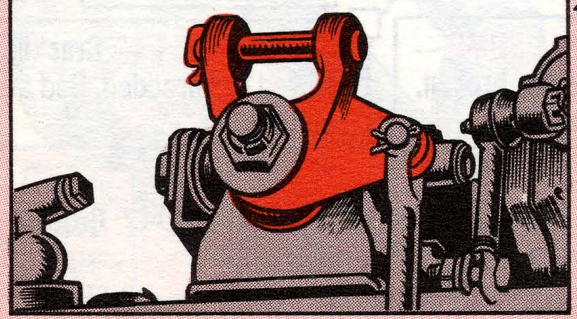


AIR CLEANER—Clamps loose or busted. (Replace element every 50 hours.) Service as required.



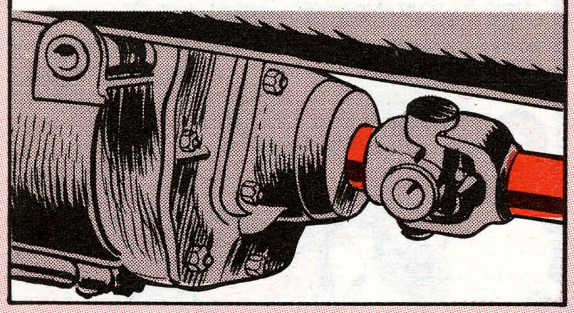
BRAKEDRUM — **Loose, leaks,** rusty (faulty M274A3 brakeband). Disconnected retainer springs.

TOW BAR BELLCRANK — Sticks, bolt rusty, **nut and safety pin missing.**

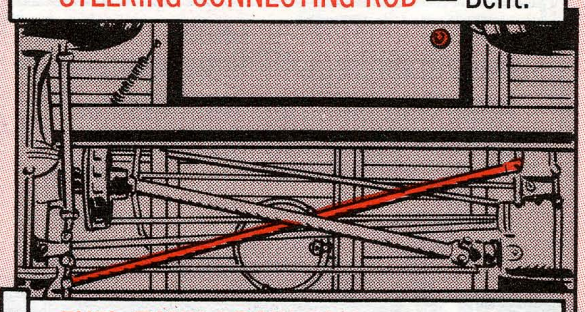


PS MORE

PROPELLER SHAFT—Noise, whip, backlash. (Lubricate) Broken Snap ring.



STEERING CONNECTING ROD — Bent.



FUEL TANK DRAIN PLUG — Leaking.

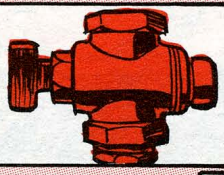
THE ENGINE CHECK

ENGINE — Use Kit, retrofit, FSN 2805-788-5110, to change from A053 4-cylinder engine to A042 2-cylinder engine.

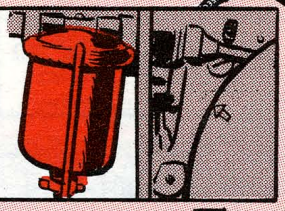
GOVERNOR — Linkages clogged with dirt will affect idle and maximum speed performance.

FUEL LINES—**Leaks** (check for defective tubing and connections made for A042 engines).

BREATHER VALVE — **Plugged.**



FUEL FILTER — Dirty, loose.

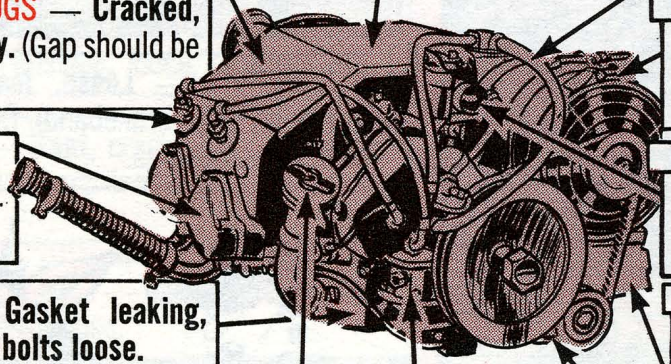


SHROUD — Loose, dirty, damaged, screws missing.

MANIFOLD — **Leaking,** connections loose. **Blown gaskets.**

IGNITION WIRING — Cracked, shield broken open, threads crossed.

SPARK PLUGS — **Cracked, fouled, dirty.** (Gap should be 0.030.)



BLOWER — **Bolts missing,** loose. Clamps loose, broken.

VALVE COVERS — **Leaks.**

CARBURETOR — Idles too fast or too slow. **Jets clogged.** Dirt and grime.

OIL PAN — **Gasket leaking, plug leaking, bolts loose.**

OIL COOLER — Clogged. (Clean fins.)

CRANKCASE OIL — Level too low. (2-1/2 qts in M274A2 thru M274A5.) **Cap missing, gasket damaged or missing.**

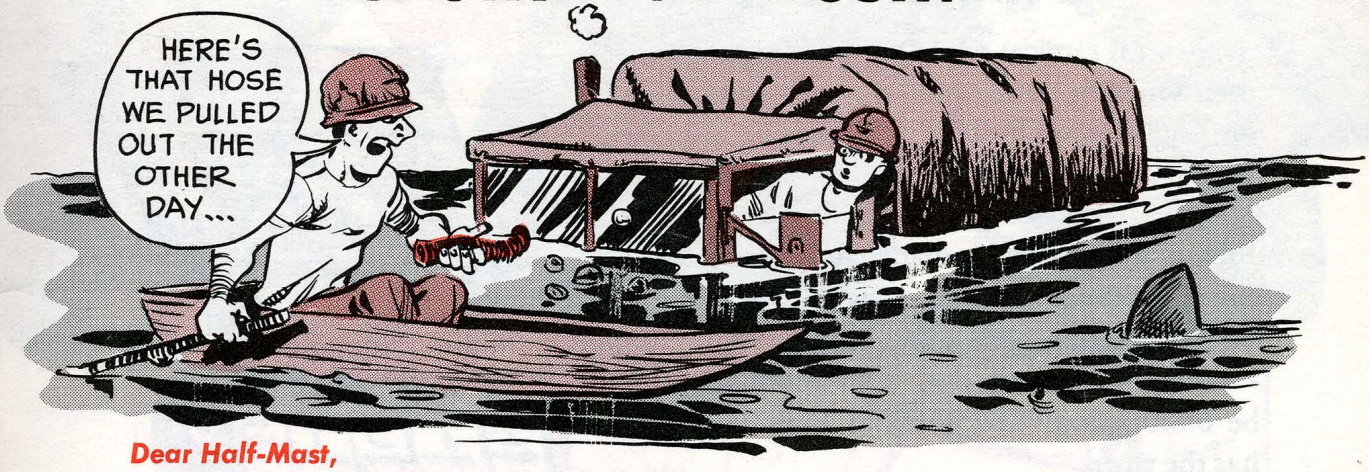
FUEL PUMP — **Leaks, broken, loose.**

BLOWER BELT — **Cracked,** frayed or shredded. Bad adjustment.

Here're your organizational TM's:

TM 9-2320-213-10 (Aug 65)
TM 9-2320-213-20 (Oct 65)
TM 9-2320-213-20P (Aug 63)
TM 5-2805-213-14 (Jul 69), AO42 Engine
TM 9-2320-246-10 (Apr 67)
TM 9-2320-246-20 (Jul 67)

STORY ON HOSIN'



Dear Half-Mast,

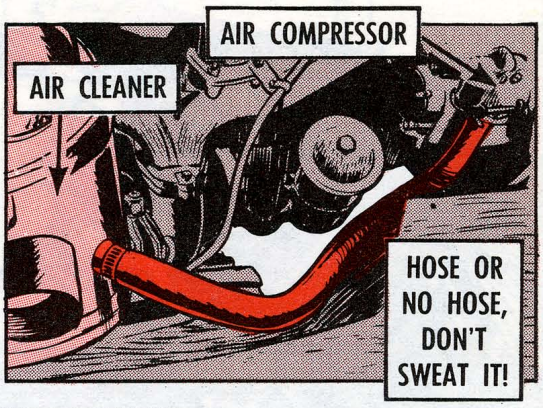
What's the deal on the rubber vent hose between the air cleaner and the air compressor of the G742-series 2½-ton trucks? The M35A1 doesn't have it. Is there a TB or MWO published to remove this hose?

CWO M.E.L.

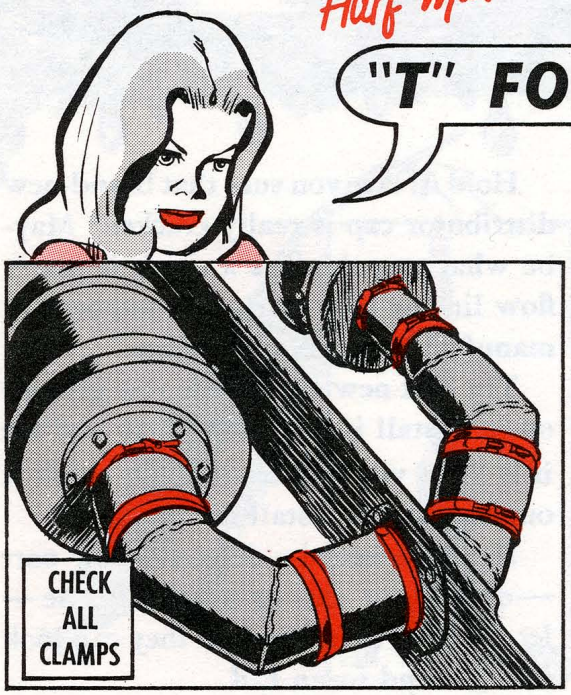
Dear Mr. M.E.L.,

No. The hose was put on the early-production vehicles, but was dropped by the time your M35A1 came around. So, if you have it, it's OK. If not, it's OK too. The only time you really need the hose is for fording. It's part of the deep-water fording kit.

Half-Mast



"T" FOR YOU



You need T-bolt hose clamps on the air intake system of your M39A1 5-ton truck (Mack diesel engine). That's the only kind that'll stay tight and keep dirt 'n' water from gettin' into your turbocharger and raisin' heck with your engine.

Check your hose clamps. If you don't have the T-bolt kind, get 'em:

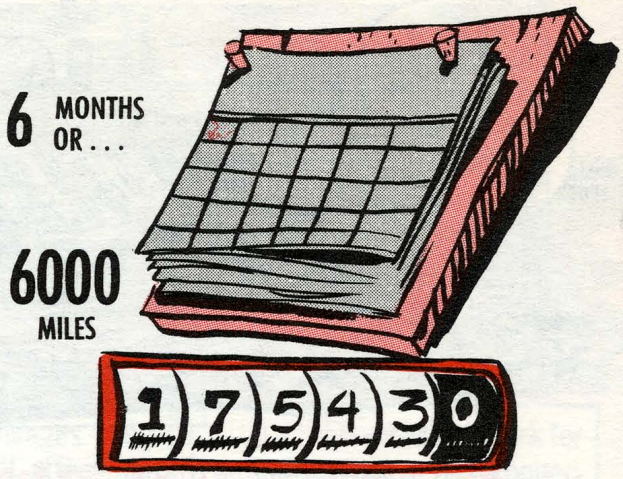
FSN 4730-782-5458 (2 of 'em for the hose at the turbocharger).

FSN 4730-782-5459 (6 of 'em for the 3 hose sections comin' from the air filter).

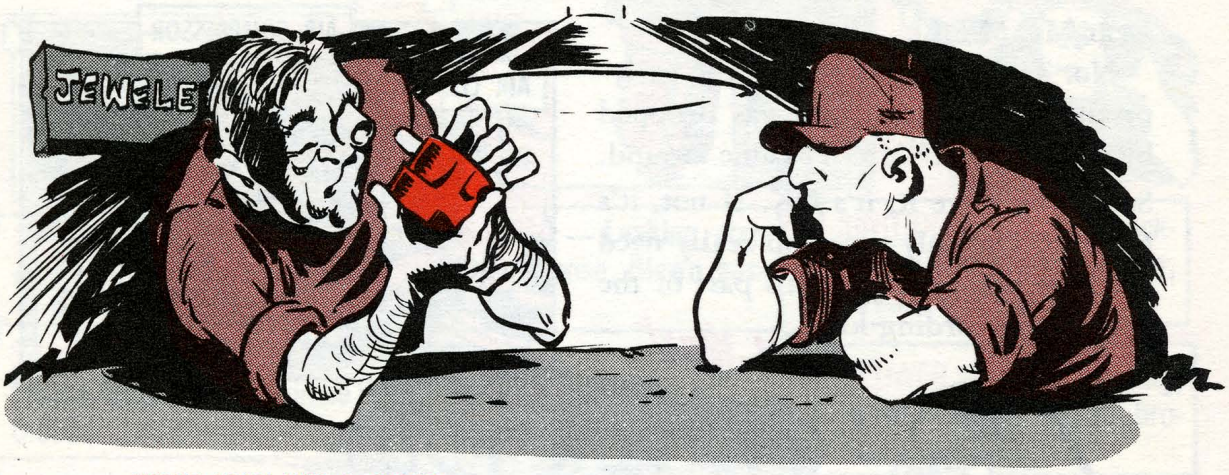
"S" SERVICE — 6 OR 6000

Now all tactical wheeled vehicles get their semiannual (S) service at 6 months or 6000 miles instead of the old 6 months or 3000 miles.

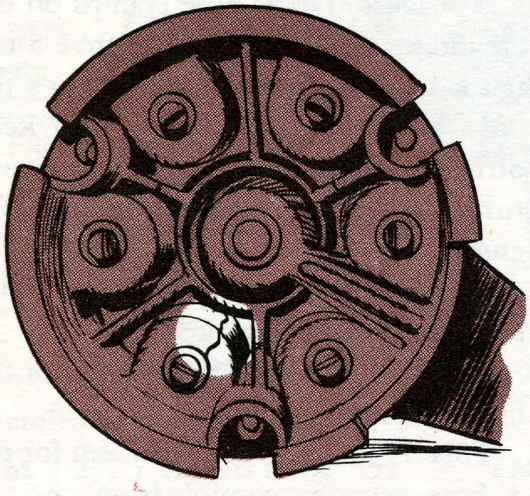
Some TM's for tactical wheeled vehicles have already made the switch from 3000 to 6000. If your TM still carries the old 3000-mile factor, make a note for yourself that it's s'posed to be 6000 miles. TB750-981-1 (Jan 70) has the word.



CRACKED CAP? MAYBE NOT



MIGHT LOOK LIKE A CRACK . . .

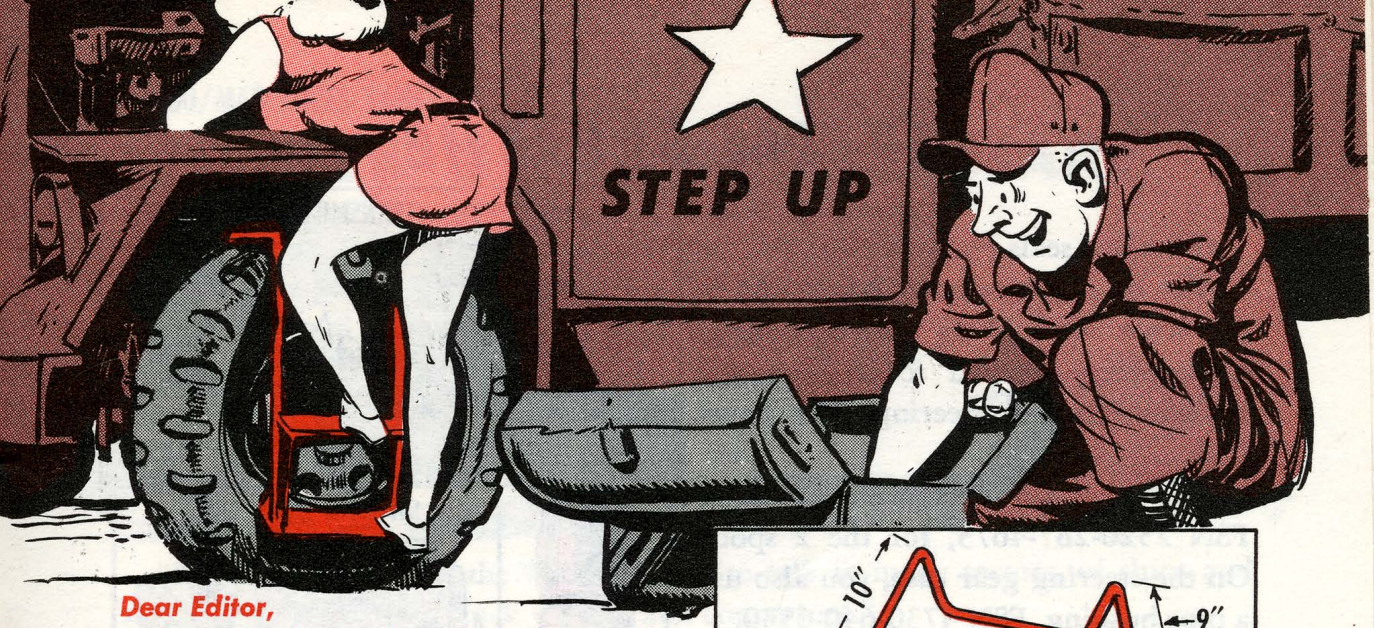


. . . BUT COULD BE A FLOW LINE

Hold it! Are you sure that brand-new distributor cap is really cracked? Maybe what you think is a crack is just a flow line or fold mark that happens in manufacturing. No problem.

Try that new cap before you give up on it. Install it in your vehicle and see if it gives you any trouble. Or check it out before you install it.

If you're issued a defective new part —distributor cap or anything else— let the head shed know so they can look into it. Send in an EIR.



Dear Editor,

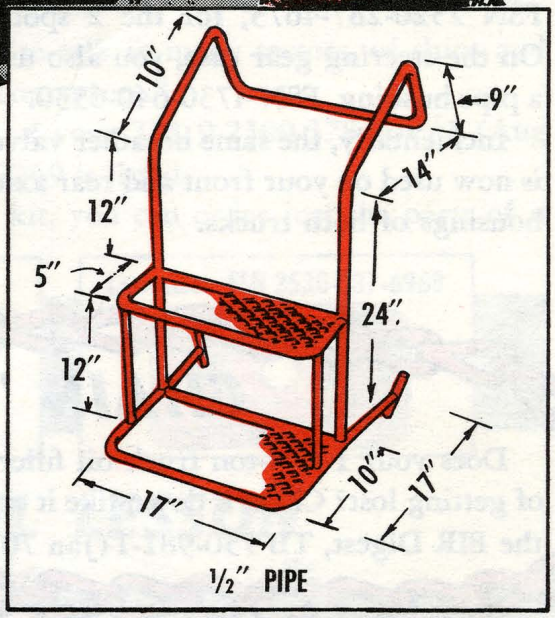
A mechanic can lean right into a big truck's engine compartment when he uses a "tire step."

This device was designed and built from scratch materials by SP4 Victor Valdes, senior wheeled vehicle mechanic in our battalion maintenance section.

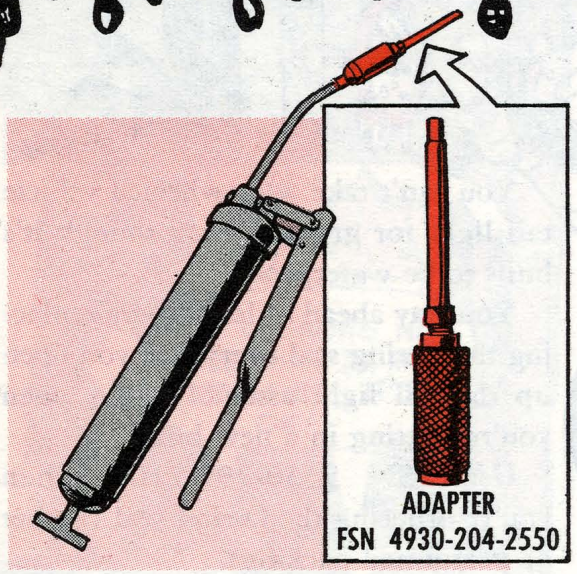
We think it's a great idea and hope you like it well enough to share it with your readers.

CPT Harry H. Lukk
CA ARNG

(Ed Note—That sure looks like a step in the right direction.)



YOUR M151 GREASE GUN ADAPTER



Sure there's an adapter that'll fit the grease gun so you can lube the U-joints on your M151 truck. It's FSN 4930-204-2550, and it's a part of the lube kit, FSN 4930-357-6301, that's in your No. 1 and No. 2 common tool kits.

There's just one catch! More than one manufacturer makes the adapter, but only the one made by Lincoln Engineering Company will fit some of those hard-to-get-at U-joints.

So, in order to get the one you need, be sure you include Mfr. Code 36251, Part No. 5855, on your request.

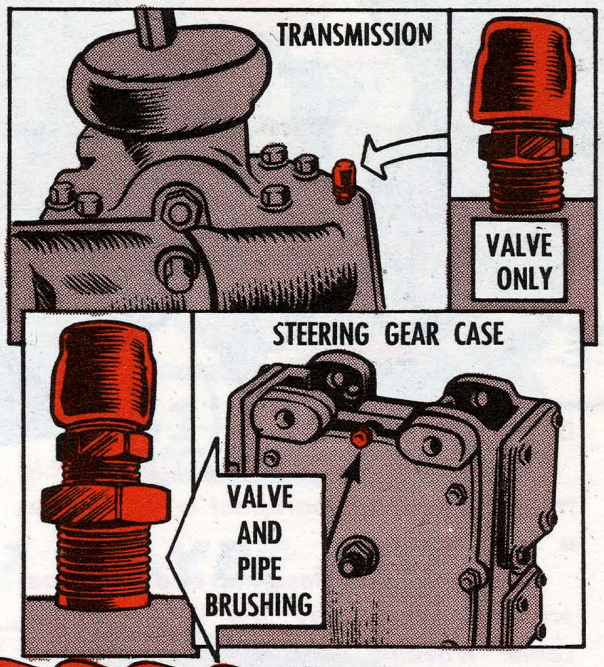
LET 'EM BREATHE

Got some seals ready to pop?

You do if you've got a 2-1/2- or a 5-ton truck with plugs where breather valves are supposed to be—on the transmission and steering gear housings.

You need air pressure relief valve, FSN 2520-287-4673, for the 2 spots. On the steering gear case, you also use a pipe bushing, FSN 4730-640-6530.

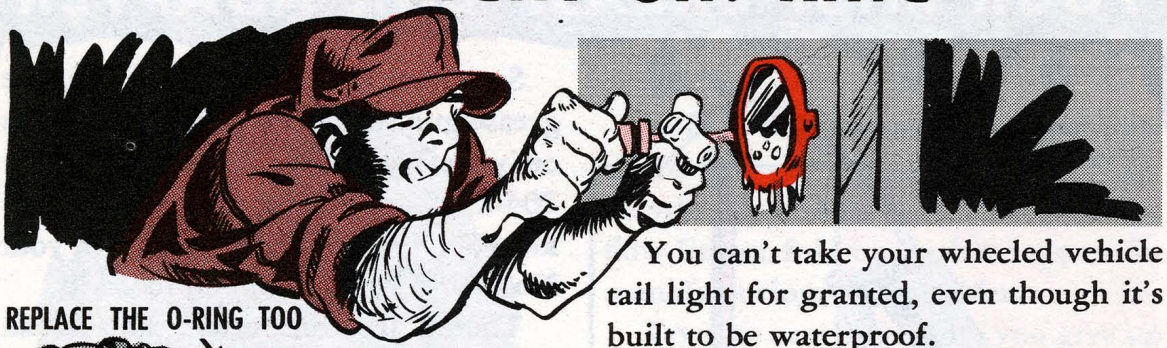
Incidentally, the same breather valve is now used on your front and rear axle housings of both trucks.

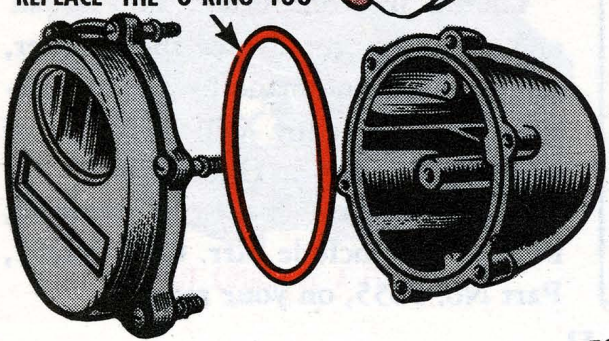


CHAIN 'ER DOWN

Does your 1-1/4-ton truck oil filler cap have a habit of getting lost? Chain it down like it says in Article 46 of the EIR Digest, TB 750-981-1 (Jan 70).

TAIL LIGHT OH! RING





You can't take your wheeled vehicle tail light for granted, even though it's built to be waterproof.

You stay ahead of leakage by replacing the O-ring seal everytime you open up the tail light assembly, like when you're putting in a new bulb.

Use FSN 5330-297-7106 when you're ordering the O-ring seal (gasket or preformed packing).

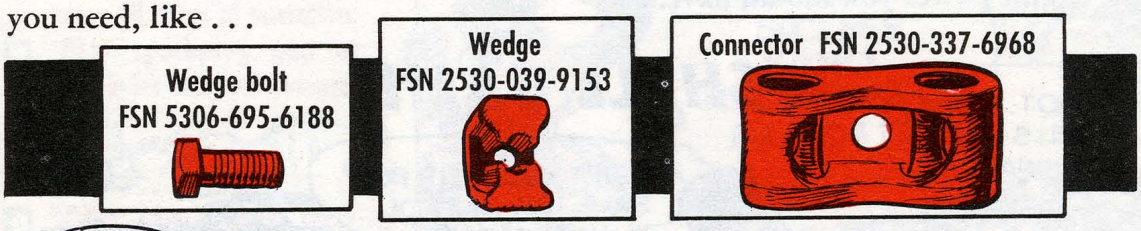
M60/M48-SERIES TANKERS . . .

NEW DEAL ON HARDWARE

"The time has come," the Walrus said, "to talk in many sectors, of ships and shoes and sealing wax, track wedges and connectors."

So cast an eye at that part of page 562 of your TM 9-2300-378-20P/1 (Aug 69) where track parts kit FSN 2530-608-2269 is listed.

From now on, instead of ordering the kit, you can order just the parts of it you need, like . . .



LUBE LEVEL LESSON

On your M107, M108, M109, M110 and M578 vehicles, no need to get shook up if the dipstick shows about 3/4 inch over the FULL mark after the vehicle's been parked overnight. This is normal, and you don't need to drain oil to bring down the level.

All the lube orders and –10 and –20 manuals are being changed to tell the same story about this 3/4 inch above FULL condition after these vehicles have been parked overnight. ('Cause if the level is more than 3/4 inch over FULL it has to be drained down to 3/4 inch.)

M108/M109 PEDAL FIX

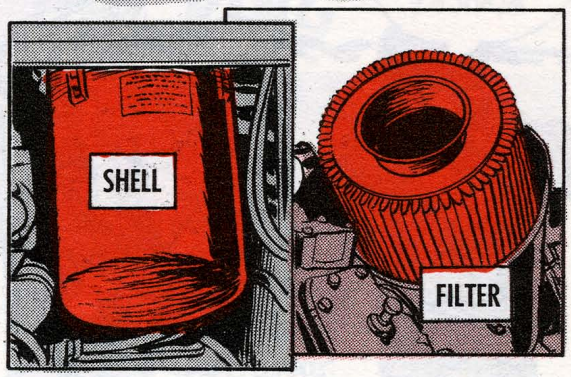
There's a new fix out to cure accelerator pedal bending on your M108 or M109 SP howitzer. It's an improvement on the method shown in TB 750-981-3 (Jul 68) and your support will apply it for you like it says in TB 750-981-1 (Jan 70). Be sure you have this done because a bent accelerator keeps you from getting the engine power you should have.

SHELL GAME

Now you see it, now you don't . . . the air cleaner shell on your M113 (gas engine) family carrier.

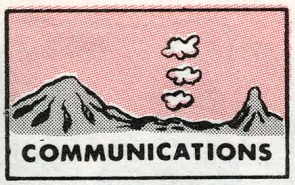
If you're already short, order it under FSN 2940-930-6207 (P/N 18170-201-1).

If you need the whole air cleaner assembly, element and all, it's FSN 2940-999-1270 (P/N 10906310).



GPFU'S FOR M114'S

For now, forget the gas particulate filter unit OK'd by your TOE for the M114 command and recon carrier. Support needs an MWO to install the unit. When the MWO's published you can order the unit. If the unit's already on hand, tho — just guard it like any other TOE item, until the MWO arrives.



Q-4 PM 4U

Some guys got it; some guys don't. Some sets work; some sets won't.

Funny thing about basic PM, 'specially in unchoice spots like SEA and on demanding equipment like an AN/MPQ-4A radar set generator:

If you have people who care about equipment enough to pull regular PM, chances are No. 1 that it'll respond by doing the job for you.

- ☐ **C**lean moisture, dust and dirt off it daily.
- ☐ **C**hange generators daily (if you've got the allotted 2, that is).
- ☐ **C**lean the oil filter weekly with diesel fuel.

- ☐ **C**lean the sparkplugs every 48 hours of operation.
- ☐ **S**et sparkplug gap at .030-in for best performance.

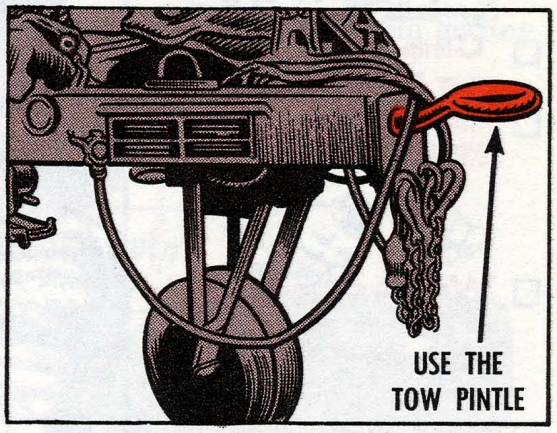
- ☐ **W**ax (that's right, wax) the generator set and Q-4A twice a month. The wax is great for shedding water.
- ☐ **C**heck power cables and fuel lines monthly for breaks, fraying, other damage . . . and replace 'em before they put the set down.

MPQ-4A TRANSIT

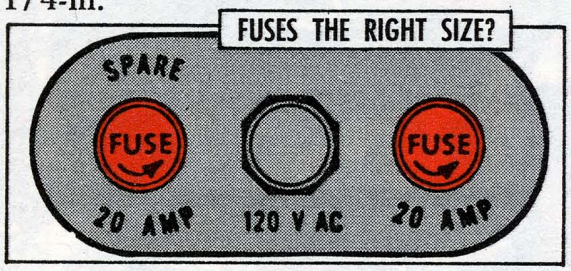
Wouldja' believe there are jokers around who actually try to move an AN/MPQ-4A radar set by picking it up with a forklift? ! ! !

If you spot a jockey comin' at your Q-4 with forks primed for action, stop him. If you don't, chances are great the radar set's trailer (V130) will buckle . . . or that the set's handwheels will be broken (making traversing impossible) . . . or pick your own damage.

The set is supposed to be towed on its trailer, not lifted. There's a tow pintle on the trailer . . . which can be used with forklift, truck, etc. So use it.



'Nother point on the Q-4: The 20-amp F655 fuse for the C-2014 power supply listed on page 9 of TM 11-5840-208-25P (May 66) under FSN 5920-284-9219, is the wrong diameter, or 1/4-in.



What you need is fuse, cartridge, FSN 5920-142-7409, which has a 9/32-in diameter.

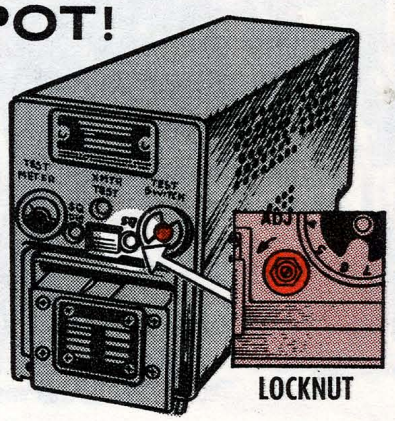
You can get the smaller fuse (listed in the TM) in the fuseholder, but it gets hot.

WATCH THAT POT!

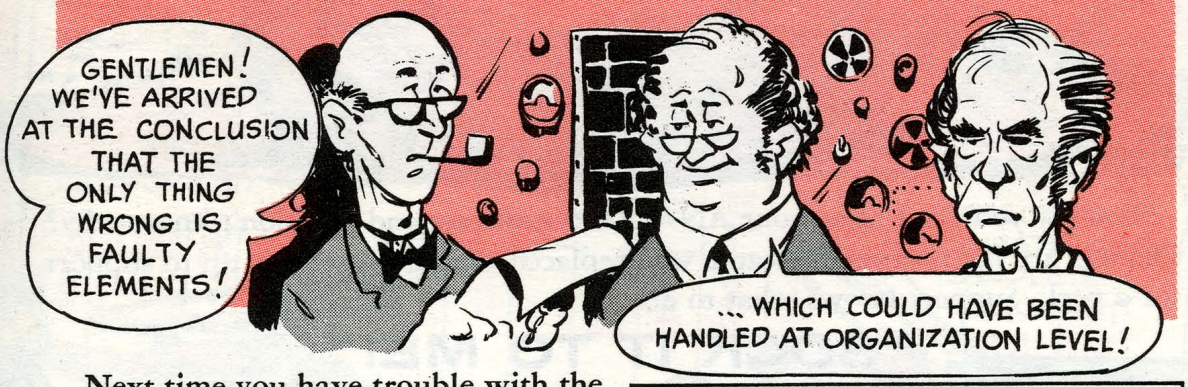
Back off one next time you're about to hit the pot slot on the squelch adjust of your AN/ARC-54 radio set.

Now, loosen the locknut of the potentiometer (R1001 variable resistor) and **then** have a go at the adjustment.

Attempting to adjust the pot with the locknut tight can damage the pot. Fact is, it breaks it.



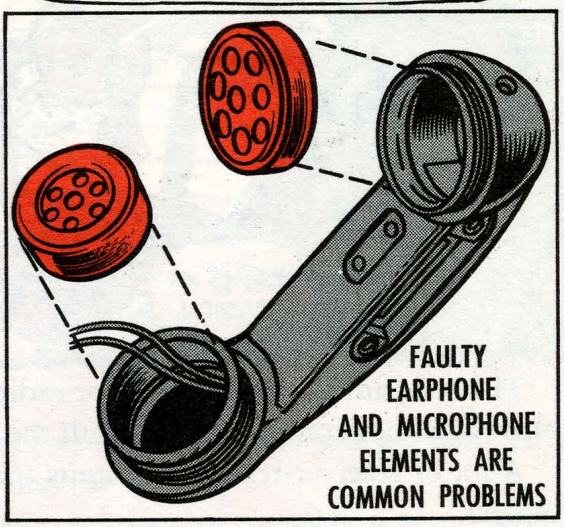
IT'S ELEMENTAL!



Next time you have trouble with the H-60 handset of your TA-312 telephone set, get elemental.

Like, a majority of the TA-312s going up to direct support for repair have nothing more wrong with them than a defective earphone or microphone element . . . and that's an organizational level repair job. So, check 'em before you ship 'em up.

The elements are listed in the organizational repair section of TM 11-5965-224-15P (Aug 63).



STICKY ANTENNA?

Got a problem with your antenna sections sticking together because of moisture or dirt?

Try a little grease.

Like, take the sections apart periodically (how periodically depends on how sticky it is there, man). Dab a light coat of silicone grease on the **male ferrule** . . . and put the sections together.

FSN 6850-880-7616 gets you an 8-oz tube of grease. It's listed in Fed Cat C-6800-IL (Jan 70).

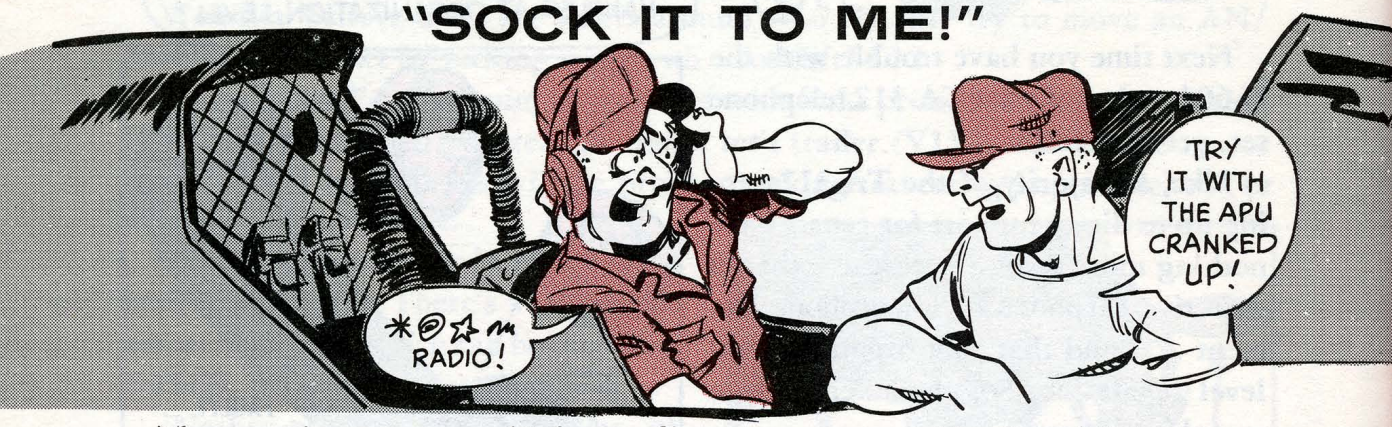
If the grease is hard to come by, try this: Unscrew the sections at least twice a week, clean 'em, snug 'em up . . . and back the upper section off one turn.

Works great. So does reading the various TM's for maintenance tips. In case you haven't seen it, there's a TM out on the AS-1729/VRC antenna, which goes by TM 11-5985-262-15 (Mar 69).

PRC-6 FIX

You say you can't aline your AN/PRC-6 radio set and you don't know why? Chances are the counter indicator was replaced wrong, so send it up to support for a peek. Support knows what to do.

"SOCK IT TO ME!"



The next time you crew chiefs or radio-types come up with a "weak" signal on a bird radio, hold one before you pull the set.

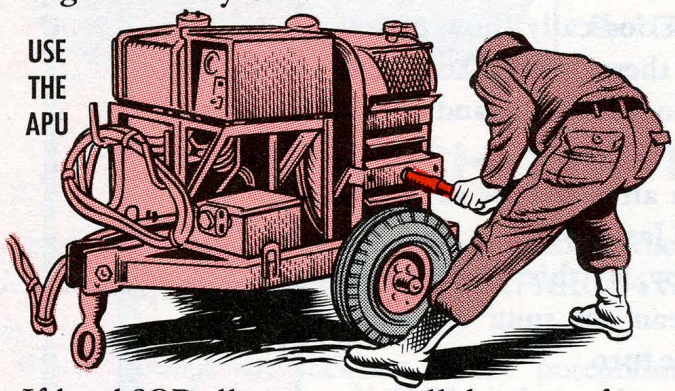
A lot of receiver-transmitter units turn up A-OK on a bench check, without any repairs.

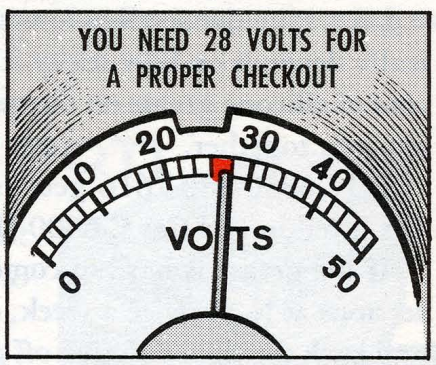
How come?

Well, the bird battery supplies 24 volts of power. With the engine (or an APU) running you get about 28 volts.

Radios are made to give out with the maximum signal at 28 volts.

To keep the bird off the deadline list — and save support a lot of sweat and elbow grease — try this:

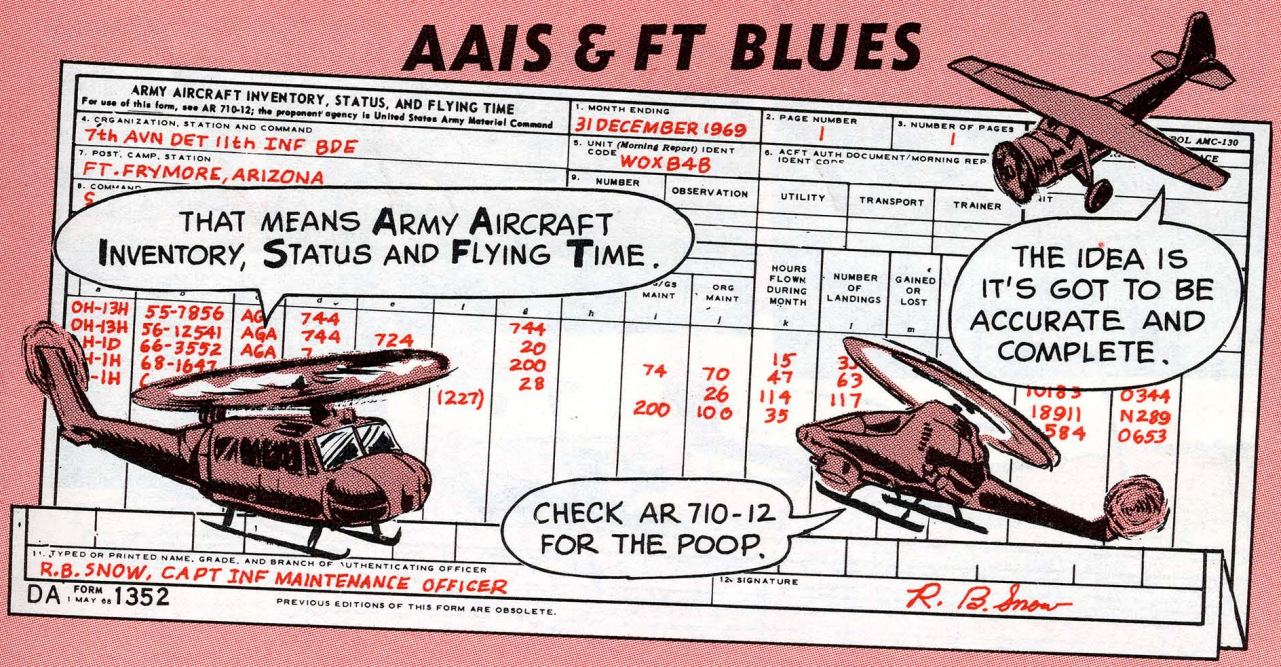




If local SOP allows you to call the tower for a radio check, plug in an APU and crank 'er up. Otherwise, have your favorite throttle jockey crank up the bird.

If the radio is up to snuff the 28 volts you get will give you a "loud and clear" signal.

AAIS & FT BLUES



If the first part of that title stumps you at first glance, it's no harder to de-code than some Army Aircraft Inventory, Status and Flying Time reports.

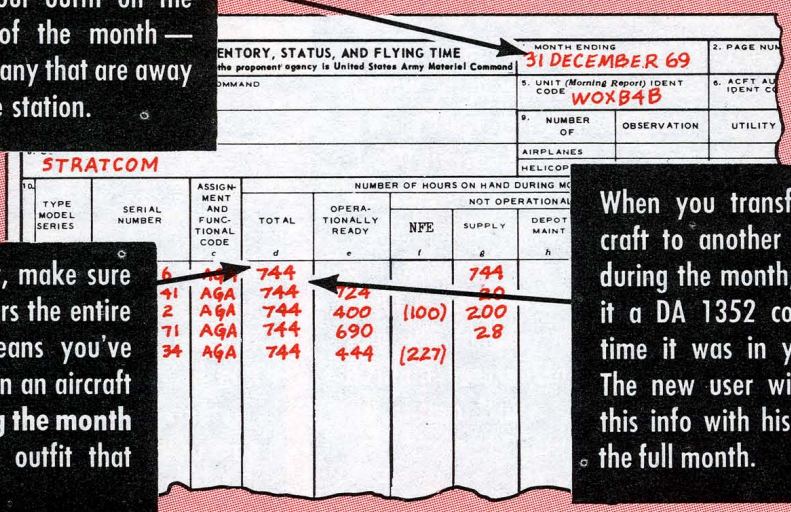
For those air-type record keepers who react only to numbers, the AAIS&FT report is otherwise known as DA 1352. And some entries on it are giving the head hangar the wild-blue-yonder blues.

Get a copy of AR 710-12 and any related command directives, and get those DA 1352 block entries **right**. Then check 'em again to be sure.

They may not be as simple as ABC blocks, but they're certainly not any more complicated than the cross-word you did on your coffee break. All you need to get 'em right is a 3-letter word meaning T-R-Y.

Here are some tips on what you need to do your thing on DA 1352:

Report all aircraft that belong to your outfit on the last day of the month — **including** any that are away from home station.



For each aircraft, make sure your report covers the entire month. This means you've got to get info on an aircraft **received during the month** from the Army outfit that had it.

When you transfer an aircraft to another Army unit during the month, send with it a DA 1352 covering the time it was in your outfit. The new user will combine this info with his report for the full month.

PS MORE

List the **complete** type-model-series entry for the aircraft in column 10a, followed by the **complete** serial number in column 10b. Tail numbers won't do. The serial number has 2 digits for the year, a dash and 3 to 5 digits on the right end. Put **no** zeros after the dash just to round it out to 5 digits. (See DA Cir 750-31 dated 4 Sep 69).

IDENTIFY YOUR UNIT

Make sure your UIC in block 5 is **right** and **readable.** Otherwise you're making a computer mixup. Each unit has 1 only and it never changes.

Make sure assignment and functional codes in column 10c fit the actual use of the aircraft, as spelled out in AR 710-12. Info here — on specific aircraft, their performance and units where they're assigned — goes into many top-level reports at both command and DA.

ARMY AIRCRAFT INVENTORY, STATUS, AND FLYING TIME
For use of this form, see AR 710-12; the proponent agency is United States Army Materiel Command

1. MONTH ENDING: 31 DECEMBER 196
2. PAGE NUMBER: 1
4. ORGANIZATION AND COMMAND: 7th AVN DET 11th INF BDE
5. UNIT (Morning Report) IDENT CODE: WOXB4B
7. POST, CAMP OR STATION: FT. FRYMORE, ARIZONA
8. COMMAND: STRATCOM

REPORTS CONTROL SYMBOL AMC-130 — DO NOT WRITE IN THIS SPACE: STATION, UNIT, COMMAND

9. NUMBER OF AIRPLANES	OBSERVATION	UTILITY	TRANSPORT	TRAINER

10. TYPE MODEL SERIES (a)	SERIAL NUMBER (b)	ASSIGNMENT AND FUNCTIONAL CODE (c)	NUMBER OF HOURS ON HAND DURING MONTH: TOTAL (d)	OPERATIONALLY READY: OPERATIONAL (e)	NFE (f)	OPERATIONALLY READY: SUPPLY (g)	DEPOT MAINT (h)	DS/GS MAINT (i)	ORG MAINT (j)	HOURS FLOWN DURING MONTH (k)	NUMBER OF LANDINGS (l)	GAINED OR LOST (m)	ENGINE MODEL AND SERIES (n)	ENGINE SERIAL NUMBER (o)	HOURS SINCE NEW OR OVERHAUL (p)	ESC (q)
OH-13H	55-7856	AGA	744			744										
OH-13H	56-12541	AGA	744	724		20				15	33					
UH-1D	66-3552	AGA	744	400	(100)	200		74	70	47	63		T53-L11	10183	0344	
UH-1H	66-16471	AGA	744	690		28			26	114	117		T53-L13A	18911	N289	
UH-1H	68-16534	AGA	744	444	(227)			200	100	35	46		T53-L13A	18584	0653	

12. SIGNATURE

CHECK YOUR TOTALS

Get operational data for the month from DA 1352-1 and other historical records like DA 2408-12. Hours on hand usually equal 24 times the days in the month. It's **never** more. If it's less, column 10m must show a gain or loss to the Army. For 5 types of aircraft (AH-1, UH-1, CH-47, CH-54 and OV-1) column 10f must show not-fully-equipped (NFE) hours, if any.

This is a change since the form was designed, and 10f should be left blank for all except the 5 types mentioned. The total of entries in columns 10e plus columns 10g through 10j must not exceed the 10d total. (The NFE total in column 10f is **included in** the OR total in column 10e.) Word went out to major commands in DA Msg 902120 (22 Mar 69).

Log records give you turbine engine data for columns 10n through 10p. Hours since new get N as a prefix (N210). For hours since overhaul use 0 as a prefix (0540). For each serial-numbered engine there should be only 1 "hours" entry.

Use the AR 710-12 code as a suffix for each gain or loss entry for the month (column 10m). If the AR has no code that fits, explain the loss or gain under "Remarks" on the back of DA 1352. (A gain or loss, as reported in this column, does **not** include within-Army transfers.)

BACK-UP DETAILS

The back of that DA 1352 can be as important as the front — maybe more so.

If your unit's aircraft are below the operationally ready guidelines for your area, you've got to explain it — on the back.

13. SERVICEABILITY CODES					
CODE	STATUS	REASON	CODE	STATUS	REASON
11	(GREEN) Ready		23	(RED) Not Ready	Parts
12	(AMBER) Ready		24	(RED) Not Ready	Inoperable
21	(RED) Not Ready	Obsolete	25	(RED) Not Ready	ESC Score
22	(RED) Not Ready	Urgent MWO	26	(RED) Not Ready	Shortage

14. REMARKS

EXCESSIVE NORS:

OH-13 - Large quantity of miscellaneous parts required to repair crash damage.

UH-1D - T/R hub assy . . . . . 1615-939-6825 . . . . B-17

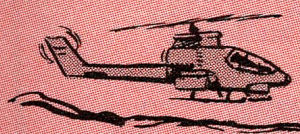
EXCESSIVE NORM:

UH-1H - Build up end installation of engine, trouble shooting and repair of avionics system and periodic inspections. Maintenance problems are further complicated by shortage of qualified maintenance personnel and indequate hangar facilities.

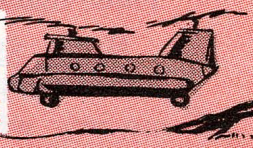
NFE:	HOURS NFE
UH-1H - Avionics inoperable.	227
UH-1D - External Cargo Suspension	100

Likewise, if you fall below DA operational readiness standards on supply (NORS) or maintenance (NORM), tell it like it is in DA 1352 remarks.

If there are a few "problems" parts or components in your NORS rating, list the aircraft type, part or component name and FSN and the routing identifier code, like so:

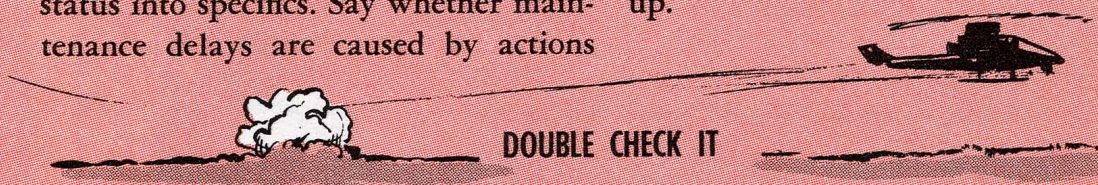


UH-1 - T/R cone set ..... 1615-775-7739 - B-17
UH-1 - Lever assy ..... 1560-775-3846 - B-17
U-21 - Reverse current diode ..... 5961-992-5305 - S-9E



When the NORS hang-up is due to a large number of miscellaneous parts, just say so. There's no need to list 'em. (No need to give aircraft serial numbers in these NORS remarks.)

Break down your remarks on NORM status into specifics. Say whether maintenance delays are caused by actions called for by TM's, TB's, MWO's and such, by component replacements, by work delays due to weather, or by shortages (funds, personnel, tools or equipment). This should be an overall report — not just an individual aircraft hang up.



DOUBLE CHECK IT

After you finish the report, cross check all details. It may help to compare it with your report for the previous month.

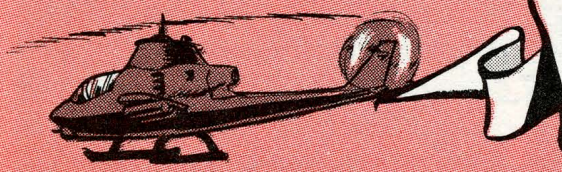
Since details of this report also effect your CO's Summary Evaluation, under either AR 220-1 or AR 135-8, you'll want to make sure it's both accurate and complete.

Once it's checked, though, move out with it. As soon as possible after the end of the month, send the original only by registered airmail direct to:

COMMANDING GENERAL
U.S. ARMY AVIATION SYSTEMS COMMAND
ATTN: AMSAV-D-ZRA
P.O. Box 209
St. Louis, MO. 63166

Do yourself and all air crewmen a favor. Get those AAIS&FT reports right the first time.

PS END



HUEYCOBRA

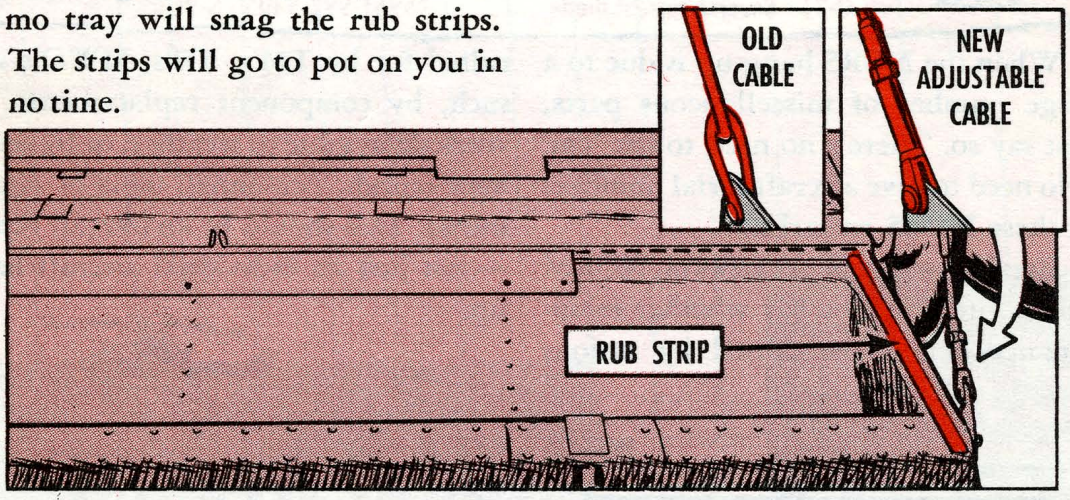
Keeping your AH-1G gunship in the fracas calls for pulling regular PM and using a little savvy, in the bargain like. . .

DOORS DROOPY?

While you're making your PM rounds, open the turret ammo door and focus on the teflon rub strips. Those babies carry a lot of weight.

If the door is lower than the ammo compartment floor, the ammo tray will snag the rub strips. The strips will go to pot on you in no time.

To bring a droopy door up to floor level, make sure you have the new, thicker adjustable cable, P/N 209-030-337-1. It has threaded terminals which means you can adjust the door.



Latch on to a straight edge and dial indicator.

Have one of your buddies, in the 150-lb class, park his carcass on the door to simulate the weight of the ammo trays.

Adjust the clevis at the lower end of the cable so that the floor and door rub strips aline within plus or minus .06-in.

STOPS BOOT SNAGS

If your favorite throttle jockey says his boot catches on the heel rest when the T/R pedal is adjusted full aft, have a look-see at TB 750-992-4 (1 Nov 68). Solve the problem by filling the forward edge of the heel rest with metalset A-4, according to the poop on page 36 of the EIR Digest.

THE EYES HAVE IT

HUEYCOBRA QUICKIES

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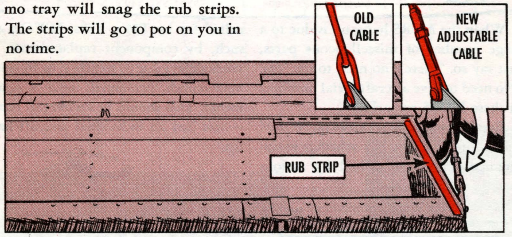

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"THE WORD"

For "the word" on the new environmental control system in your HueyCobra (AH-1G) turn to page 11-6 of TM 55-1520-221-20. Ch 7(28 Jan 70) has the maintenance info to keep your favorite throttle jockey from losing his cool.

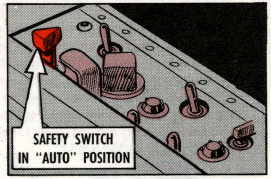
FILL 'ER UP!

Like—when you eye the engine oil level on a Preventive Maintenance Daily the sight gage may not always give you a correct reading . . . if you can read a gage that's probably clouded over in the first place!

So, take the cap off the tank and crane your neck. See that the oil level is up to the lip of the filler neck. Keep it at that level and your engine will never go thirsty for lack of oil.

SAFETY SWITCH

The next time you hop into your baby have a look-see at the emergency fuel-control switch to see that it's safetied, in both the pilot's and gunner's cockpits.



The switch should be safetied to prevent the pilots from accidentally moving the switch from AUTO to EMER position.

The switch may have been used in the emergency position to shorten engine run-up time by manually controlling the fuel.

The trouble is, it's nigh-on to impossible to second guess the fuel control. The result can be a hot start, engine overspeed . . . shortened engine life.

If your bird doesn't have the triangular switch secured in the automatic position, latch onto some low-strength copper "shear" wire. The wire will break easily when the pilot really needs to use the switch in an emergency.

Put a fillister head screw in the console just forward of the switch. Lock the screw into the console with epoxy cement.

Drill a small hole in the forward end of the triangular switch cover to accept the safety wire.

Safety the switch to the screw with one strand of wire.

QUICKIES

"THE WORD"

For "the word" on the new environmental control system in your HueyCobra (AH-1G) turn to page 11-6 of TM 55-1520-221-20. Ch 7(28 Jan 70) has the maintenance info to keep your favorite throttle jockey from losing his cool.

FILL 'ER UP!

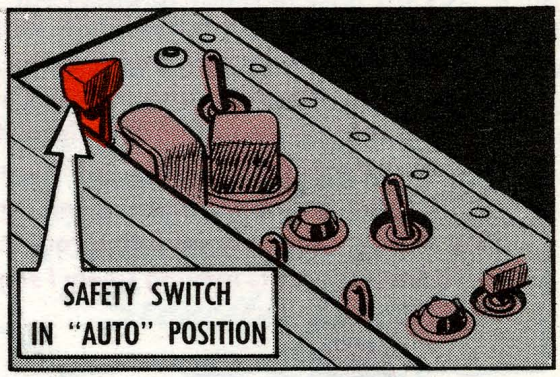
Like—when you eye the engine oil level on a Preventive Maintenance Daily the sight gage may not always give you a correct reading . . . if you can read a gage that's probably clouded over in the first place!

So, take the cap off the tank and crane your neck. See that the oil level is up to the lip of the filler neck. Keep it at that level and your engine will never go thirsty for lack of oil.

SAFETY SWITCH

The next time you hop into your baby have a look-see at the emergency fuel-control switch to see that it's safetied, in both the pilot's and gunner's cockpits.

The switch should be safetied to prevent the pilots from accidentally moving the switch from AUTO to EMER position.



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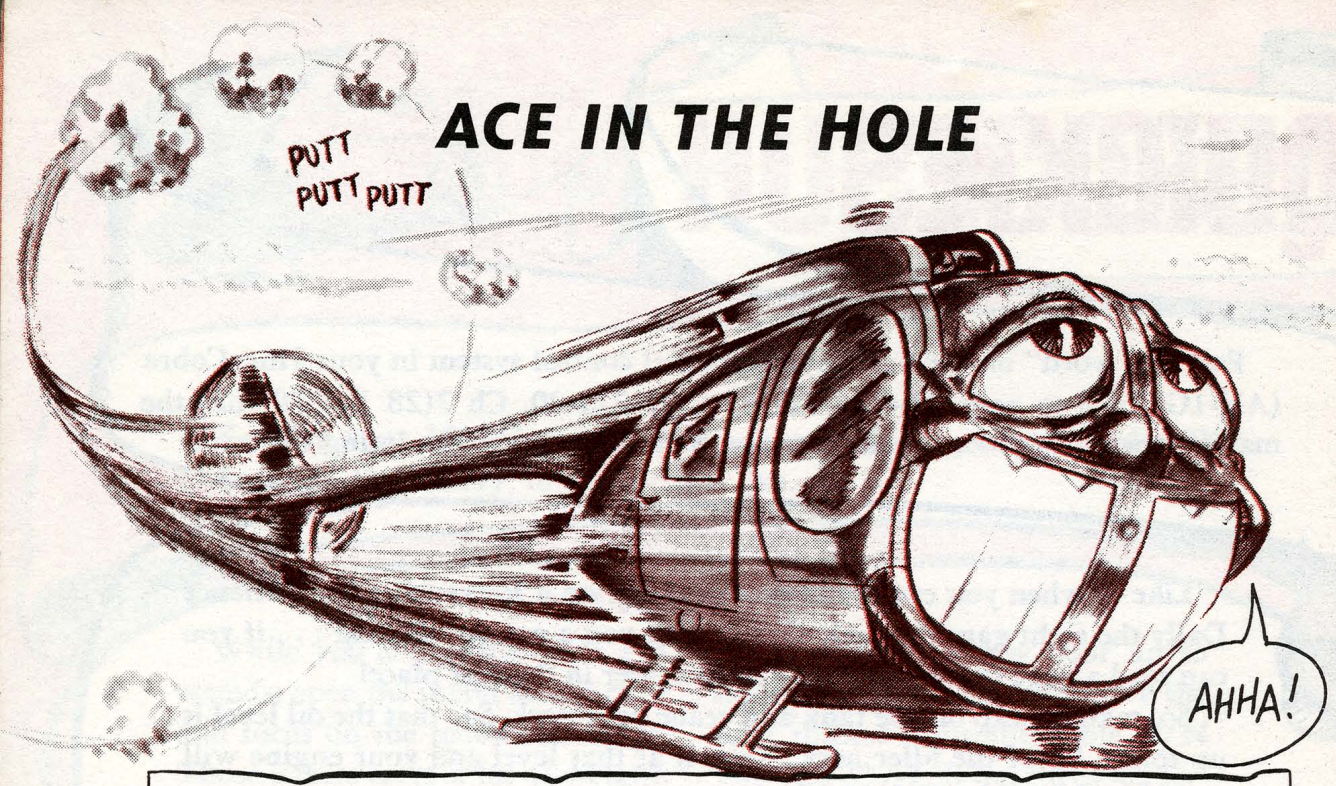
ACE IN THE HOLE



Dear Editor,

There're times when a Cayuse pilot needs to take emergency action. Like — when the fuel control, governor, throttle or rigging goes kaput.

A governor failure, for example, can produce severe vibration as the N2 and rotor RPM increases beyond limits. Major repairs will be needed unless the pilot pulls the emergency fuel shutoff valve and goes into autorotation.

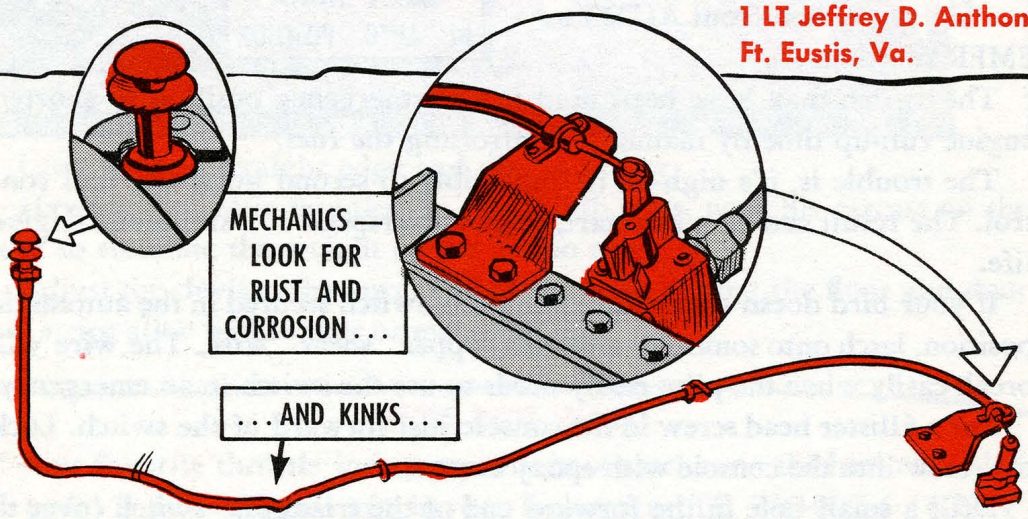
The ace-in-the-hole valve has to work.

If the cable is kinked and binds, or the cockpit release rod and valve is frozen due to rust and corrosion the valve won't work . . . it happens!

The valve full-travel check called for in para 3-19z.aa of TM 55-1520-214-10, Chg 1 (Nov 69) is just not being followed.

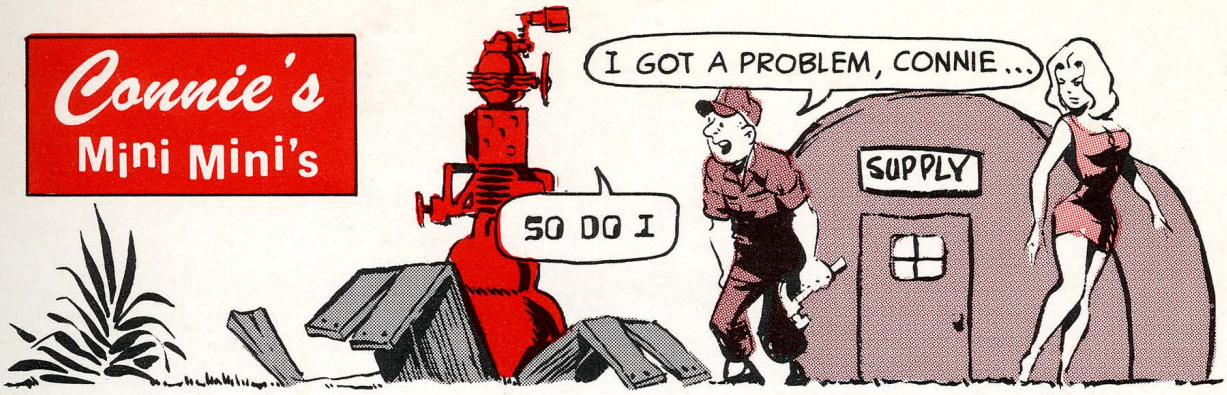
To keep the parts moving freely I suggest pilots follow the preflight to the letter.

1 LT Jeffrey D. Anthony
Ft. Eustis, Va.



(Ed Note — Good idea. Maintenance types should also remember that the OH-6A checklists call for a valve control check every Periodic.

Connie's Mini Mini's



New Battery Pubs

Not 1, but 3 new pubs are out on the nickel-cadmium batteries. TM 11-6140-203-15-1 (Dec 69) covers general information on nickel-cadmiums; TM 11-6140-203-15-2 (Dec 69) deals with aircraft nickel-cadmiums; and TM 11-6140-203-15-3 (Dec 69) delves into non-aircraft nickel-cadmiums.

Watch That Gift

Birthday gift? Or did the mail bring you a late Christmas package? Fine. Great! But watch it. If any gift gives you oil for your rifle, give that lube the trash-can treatment. Some of that stuff can zap your favorite rifle. Use only LSA on your M16A1 rifle. Order a 2-oz plastic bottle with FSN 9150-935-6597. Be sure it's identified as MIL-L-46000A.

Retain Reproducer Container

That AN/GSQ-64 (MLU) signal data reproducer part of your M18 FADAC gun direction computer should never be allowed to travel alone. Any time you need to transport it as loose cargo in a truck bed, be sure it goes back into its reusable shipping container . . . which you're supposed to **keep** at organizational maintenance level.

M151 Safety

Make sure you're up on the latest safety requirements for operation of your M151-series ¼-ton truck. Get DA Cir 385-24 (Jan 70). It's also got some dope on the new M151A2 you'll be seein' soon. **Special driver training is required** for operation of all models in this series.

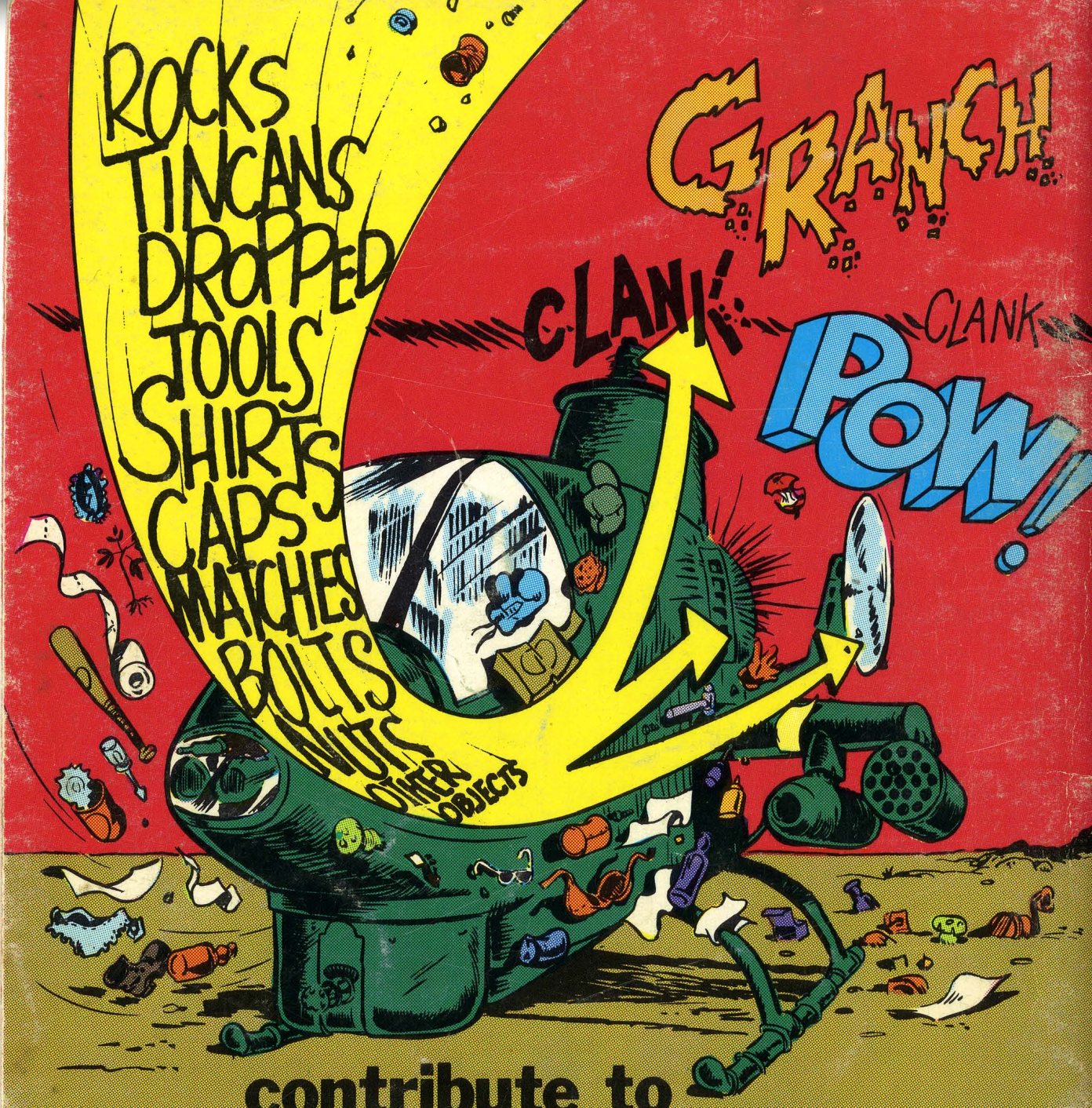
Free For M715

Have you got a leak at the seams of the radiator tanks in your M715 1¼-ton truck (or M725 ambulance)? Don't spend your time or Uncle's money tryin' to fix it. The vehicle manufacturer will take care of it under the warranty — even if your truck has gone past the 2-years-or-6,000-miles limit.The word's in TB 750-981-4 (Oct 69), Article 45.

Stencils, Decals, ID Plates

Need a stencil or a decal? You'll find stencils listed in Fed Cat C7510/30-IL-A (Mar 69) and CB4 (Mar 70), Office Supplies. Look in the 7520 group and class. For decals you look in SC 7660/90-IL (Jun 67). You'll find decals such as CAUTION: HIGH VOLTAGE, FSN 7690-281-3077. If you need an instruction plate or an ID plate, look in Fed Cat C9900-IL-A and CB3 (Mar 70), Miscellaneous Items.

Would You Stake Your Life *right now* on the Condition of Your Equipment?



contribute to

Foreign Object Damage

Results can be Costly and Tragic!

CLEAN UP YOUR PAD, DAD!